Appendix L. Agency Scoping Comments

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DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE
PITTSBURGH, PA 15222-4186

REPLY TO
ATTENTION OF

October 1, 2014

Operations Division
Regulatory Branch
2014-321

Mr. Ellis Gilliland, P.E.
Missile Defense Agency/DPF
Bldg 5222 Martin Road
Redstone Arsenal, Alabama 35898

Dear Mr. Gilliland:

I refer to your memorandum dated September 25, 2014 received in this office September 29, 2014 for the possibility of building an Interceptor Site at the Camp Ravenna Joint Military Training Center-Ohio Army National Guard, Portage and Trumbull Counties, Ohio.

The US Army Corps of Engineers regulates any earth moving activities within streams and/or wetlands. This includes any placement of fill material, temporary or permanent. If the site is chosen, the resources should be delineated and this office again contacted. Every effort should be made to avoid and minimize impacts to the aquatic resources on-site.

This project has been assigned Department of the Army Permit Number 2014-321. Please refer to this number in all future correspondence. If you have any questions, please contact Nancy Mullen at (412) 395-7170 or by email at Nancy.J.Mullen@usace.army.mil.

Sincerely,

Scott A. Hans
Chief, Regulatory Branch

From: Crosby, Buff L CTR MDA/DPFE <buff.crosby.ctr@mda.mil>
Sent: Tuesday, October 28, 2014 12:28 PM
To: Claxton, Marshall; Call, Kevin L CIV MDA/GCG; Van Rassen, Cynthia M CIV MDA/GCG; McNeil, Laura; Timpe, Doug
Cc: Gilliland, Ellis CIV MDA/DPFE
Subject: FW: Draft DOPAA for new missile interceptor sites (UNCLASSIFIED)
Attachments: USGStopo_corpsmap_161701413378323.pdf; DISDI_terrain_corpsmap_108981413377346.pdf; DISDI_aerial_corpsmap_95481413377021.pdf; DISDI_topo_corpsmap_91991413376877.pdf

-----Original Message-----
From: Gilliland, Ellis CIV MDA/DPFE
Sent: Tuesday, October 28, 2014 12:12 PM
To: Fuller, David CIV MDA/DPF/DPFE; Crosby, Buff L CTR MDA/DPFE; Lemmond, Tina R CTR MDA/DPFE
Cc: Venable, Joe, CTR, DPW
Subject: FW: Draft DOPAA for new missile interceptor sites (UNCLASSIFIED)

FYI

-----Original Message-----
From: Haggerty, James W NAD [mailto:James.W.Haggerty@usace.army.mil]
Sent: Tuesday, October 28, 2014 11:12 AM
To: Gilliland, Ellis CIV MDA/DPFE
Subject: FW: Draft DOPAA for new missile interceptor sites (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Ellis,

I'm sending this unencrypted, hopefully this will work, let me know if it doesn't and I'll ask for expert assistance.

James W. Haggerty
James.W.Haggerty@usace.army.mil
Regulatory Program Manager
North Atlantic Division
US Army Corps of Engineers
Fort Hamilton, Brooklyn, NY
Homepage: http://nad.usace.army.mil
Office 347-370-4650
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-----Original Message-----
From: McDonald, Jodi M NAN02
Sent: Wednesday, October 15, 2014 1:17 PM
To: Haggerty, James W NAD
Subject: FW: Draft DOPAA for new missile interceptor sites (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jim - Below are New York District's comments related to the Ft Drum site.
Also attached are maps showing the extent of known wetlands on Ft Drum. As you'll see in the maps, there are a lot of wetlands on this installation.
R/JM

COMMENTS:

The draft documents provided to this office includes only the purpose and need statement, and alternatives being considered. Much of what input we could provide would be related to potential environmental impacts, which should be included in later chapters of the EIS. It is difficult to properly evaluate potential alternatives without an analysis of potential environmental impacts.

The EIS should include the information listed below which outlines USACE requirements for reviewing the project under Federal regulatory jurisdictions, which includes Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Section 404 of the CWA regulates the excavation in and the placement of any dredged or fill material in any WOUS, including wetlands.
Most waterbodies, including wetlands, ephemeral, intermittent, and perennial streams, as well as natural drainage courses, are considered to be regulated, regardless of size.

Based on our review of GIS data layers in CorpsMaps, including the Defense Installations Spatial Data Infrastructure (DISDI) wetlands data layer (see attached), there are potential waters of the US (WOUS), including streams and associated wetlands, in the area of both Fort Drum alternative sites that may be impacted by the proposed facilities. Potential impacts could result from construction activities including, but not limited to, grading for proposed facilities, infrastructure improvements, construction staging areas, or other activities that involve the discharge of dredged or fill material into WOUS.

When impacts are contemplated to occur within those areas of USACE jurisdiction, the boundaries of WOUS, including wetlands, must be delineated according to the current Federal methodology, including the appropriate Regional Supplement, which requires an evaluation of hydrology, vegetation, and soils present on the site. Results of the delineation should be summarized in a report and submitted to the USACE for review. An Application requesting authorization to conduct work in Federally regulated WOUS, should include a detailed description of the proposed construction activities listing the individual fill requirements (in acres) for each aquatic resource proposed to be filled or substantially modified. The application must include all proposed activities that are reasonably related to the same project and that require a permit in the same permit application.

Projects that involve the discharge of dredged or fill material into WOUS are evaluated in accordance with the guidelines promulgated under Section
404(b) (1) of the CWA (40 CFR 230.10). Fundamental to these guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in Combination with known and/or probable impacts of other activities affecting the ecosystem of concern. This review includes, among other factors, the consideration of all practicable alternatives, as well as cumulative and secondary effects on the aquatic ecosystem.

Applications requesting authorization to impact WOUS must include a statement describing how impacts would be avoided and minimized. When impacts to waters of the United States, including wetlands, are proposed, mitigation is often required. The objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to WOUS. Mitigation requirements can be found in Title 33 of the Code of Federal Regulations Part 332.

USACE recommends that the EIS include the Federal requirements for reviewing projects under Section 404 of the CWA, as described above, and as they pertain to avoidance and minimization of impacts to jurisdictional WOUS, Alternatives analysis, and required compensatory mitigation for impacts authorized under Section 404 of the CWA.

The National Historic Preservation Act (NHPA) (16 U.S.C. 470) requires federal agencies to consider potential impacts of their activities on sites eligible for listing in the National Register of Historic Places. Section
106 of the NHPA sets out criteria for assessing effects and consultation with the Advisory Council on Historic Preservation, and other interested parties where required. The Endangered Species Act (ESA) (16 U.S.C. 1531) requires federal agencies to consider potential impacts of their activities on listed species and their critical habitat. Section 7 of the ESA sets out criteria for assessing effects and consultation with the US Fish and Wildlife Service where required. USACE also recommends the EIS evaluate potential impacts under the NHPA and ESA in this EIS. Not only would this evaluation assist in the selection of the least environmentally damaging practicable alternative, it could also avoid future delays in processing any required USACE permits.

John R. Connell
Senior Project Manager, Upstate New York Section DEPARTMENT OF THE ARMY US Army Corps of Engineers, ATTN: CENAN-OP-RU
1 Buffington St., Bldg. 10, 3rd Fl. North Watervliet, NY 12189 office (518) 266-6357 mobile (518) 487-0423

PLEASE USE THE ABOVE 18-CHARACTER FILE NUMBER ON ALL CORRESPONDENCE WITH THIS OFFICE

CORPS ENVIRONMENTAL PRINCIPLES
--Strive to achieve environmental sustainability.
--Recognize the interdependence of life and the physical environment.
--Seek balance and synergy among human development activities and natural systems.
--Continue to accept corporate responsibility and accountability under the law.

--Seek ways and means to assess and mitigate cumulative impacts to the environment.
--Build and share an integrated scientific, economic, and social knowledge base.
--Respect the views of individuals and groups interested in Corps activities.

In order for us to better serve you, please complete our Customer Service Survey located at:

http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

-----Original Message-----
From: McDonald, Jodi M NAN02
Sent: Friday, October 03, 2014 8:07 AM
To: Gitchell, Amy L NAN02
Cc: Connell, John R NAN02
Subject: FW: Draft DOPAA for new missile interceptor sites (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Amy - FYI. Please provide comments regarding the Fort Drum proposal by the 20th of October to me, so I can get the comments to Jim Haggerty. R/JM

-----Original Message-----
From: Haggerty, James W NAD
Sent: Friday, October 03, 2014 7:06 AM
To: Chubb, Suzanne L LRD; McDonald, Jodi M NAN02
Cc: Desista, Robert J NAE; Delgiudice, Frank J NAE; Connell, John R NAN02; Clement, Jay L NAE
Subject: FW: Draft DOPAA for new missile interceptor sites (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Suzanne, Jodi,

I am forwarding a Description of Proposed Actions and Alternatives for four proposed missile interceptor sites in Maine, New York (Fort Drum), Michigan and Ohio. The document indicates DA has agreed to be cooperating agency; I will track down whether this was done at the USACE level or higher.

The Missile Defense Agency has been dealing with the NAE Maine Project Office, who alerted me to this when they ascertained that sites outside NAE AOR were under consideration.

I proposed a target of Tuesday 21 October to finalize compilation of coordinated comments to this draft document. MDA requests our comments NLT Monday 27 October.

Suzanne--please distribute to your districts as appropriate and let's discuss which division will take the lead on this effort.

James W. Haggerty

James.W.Haggerty@usace.army.mil
Regulatory Program Manager
North Atlantic Division
US Army Corps of Engineers
Fort Hamilton, Brooklyn, NY
Homepage: http://nad.usace.army.mil
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-----Original Message-----
From: Gilliland, Ellis CIV MDA/DPFE [mailto:Ellis.Gilliland@mda.mil]
Sent: Thursday, October 02, 2014 10:39 AM
To: Haggerty, James W NAD
Cc: Clement, Jay L NAE; Crosby, Buff L CTR MDA/DPFE; Lemmond, Tina R CTR MDA/DPFE
Subject: [EXTERNAL] RE: Draft DOPAA

Per Mr. Clement's request below, attached is a copy of the Description of Proposed Actions and Alternatives for the Continental United States (CONUS) Interceptor Site Environmental Impact Statement and the memorandum requesting review and comments no later than 27 October.

If you have any questions, just let me know. Hope you have a good day.

Ellis Gilliland, PE
Deployment Environmental Compliance Officer Facilities, Military Construction, and Environmental Management Missile Defense Agency
Off: 256-450-2676
Cell: 256-468-3174
Fax: 256-450-2528

-----Original Message-----
From: Clement, Jay L NAE [mailto:Jay.L.Clement@usace.army.mil]
Sent: Tuesday, September 30, 2014 12:37 PM
To: Gilliland, Ellis CIV MDA/DPFE
Cc: Haggerty, James W NAD
Subject: Draft DOPAA

Ellis:

Thank you for sending me a copy of the above referenced document for review and comment. Because the document and eventually the EIS crosses multiple Corps Division boundaries across the country, I've been asked to have you provide a copy directly to my Division headquarters so that they may consider

coordinated comments in the interest of maximum consistency and efficiency. Point of contact is copied above and referenced below:

James W. Haggerty
Regulatory Program Manager
North Atlantic Division
US Army Corps of Engineers
Fort Hamilton, Brooklyn, NY
Homepage: http://nad.usace.army.mil
Office 347-370-4650
Mobile 718-490-6035
Car Phone 718-644-9479

Thank you in advance for your consideration in this matter.

Jay Clement
Senior Project Manager
US Army Corps of Engineers
Maine Project Office
(207)623-8367

In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey

Classification: UNCLASSIFIED
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DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF

Regulatory Division
CENAE-R-51

November 14, 2014

ATTN: Ellis Gilliland, PE
Missile Defense Agency, PDF
Bldg. 5222, Martin Road
Redstone Arsenal, AL 35898

RE: CONUS Interceptor Site; EIS Draft Description of Proposed Actions and Alternatives

Dear Mr. Gilliland:

This is in reference to your agency's proposal to develop a missile defense complex within the Continental United States ("CONUS") as part of the country's existing Ballistic Missile Defense System ("BMDS"). On September 25, 2014 you provided us a copy of your notice of intent to prepare an Environmental Impact Statement ("EIS") and Draft Description of Proposed Actions and Alternatives ("DOPAA").

Alternatives presented in the DOPAA include the no action and missile interceptor sites in Michigan, Ohio, New York, and Maine. These sites are within the operational control of multiple Corps districts. As such, you can expect to receive review comments from each affected district. Jay Clement of my Maine Project Office staff will be your primary point of contact for any future consideration of the site alternative in Maine.

Although you are undoubtedly aware of it, let me review Corps of Engineers regulatory jurisdiction at the Maine site. A Corps permit is required under Section 404 of the Clean Water Act for discharges of dredged or fill material into all waters of the United States, including inland rivers, lakes, streams, and wetlands, as well as the excavation/grading within these waters/wetlands. In interior waters, our jurisdiction extends landward to the ordinary high water mark or to the landward limit of any wetlands, whichever is more extensive.

The term "wetlands" is defined by Federal regulations as "...those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions..." (Federal Register, November 13, 1986 33 CFR Part 328.3(b)). Wetlands generally include swamps, marshes, and bogs; however, forests and meadows that lack surface waters can also be wetlands.

It is too early in the project planning to determine whether Corps permits will be required for developing the proposed site in Maine. However based on our regulatory history with the Navy at this site and the abundance of streams, wetlands and other aquatic resources in the region, it is highly likely that jurisdictional resources will be affected and a Corps permit will be

required. Should the Maine site be selected, Mr. Clement and his project office team will work closely with you and the Navy to guide you through the application process.

We have completed our review of the DOPAA and have prepared the attached comments. The Corps looks forward to continued coordination with your agency as well as the interdisciplinary review team as project planning continues.

If you have any questions concerning this matter, please contact Jay Clement of my staff at 207-623-8367 at our Manchester, Maine Project Office. Thank you for the opportunity to comment.

Sincerely,

Jay L. Clement

FOR Frank J. Delgiudice
Chief, Permits & Enforcement Branch
Regulatory Division

Copies Furnished:
James Haggerty – USACE, NAD
Mark Kern – US EPA, Region 1
Wende Mahaney – USFWS, MFO
Michael Mullin – ME DEP

CORPS OF ENGINEERS COMMENTS ON DRAFT DESCRIPTION OF PROPOSED ACTIONS AND ALTERNATIVES ("DOPAA") FOR THE CONUS INTERCEPTOR SITE DATED SEPTEMBER 2014

1. The Section 404(b)(1) Guidelines (40 CFR §230) (hereafter, "the Guidelines") are the substantive criteria used by the Corps and the Environmental Protection Agency in evaluating discharges of dredged or fill material subject to our jurisdiction under Section 404 of the Clean Water Act. No such discharges shall be permitted if there is a practicable alternative to the proposed discharge(s) which would have less adverse impact on the aquatic ecosystem. As such, a critical element of our review process is the alternatives analysis and its foundation, the determination of the basic project purpose.

The Guidelines at 40 CFR §230.10 discuss both "overall" and "basic" project purpose. The basic project purpose is the fundamental or irreducible reason for the project that is used by the Corps to determine if the proposed action is water dependent for purposes of the Guidelines. The overall project purpose is a more detailed, comprehensive, and project specific statement of the project's purpose that takes into account the needs of the public and the applicant. The Corps will define this "overall/basic" project purpose broadly to insure that a reasonable and broad range of alternatives will be examined.

For actions subject to the National Environmental Policy Act ("NEPA"), a project "purpose and need statement" must be included in environmental documentation and in response to which alternatives are presented (40 CFR §1500). This "purpose and need" may differ from the Corps Section 404(b)(1) Guidelines statement of "overall/basic project purpose". NEPA may require consideration of a broader range of alternatives than the Guidelines.

The "basic" project purpose in this case might be as simple as ballistic missile defense. The "overall" project would likely be defined after further interagency coordination but might reference deployment of a Continental United States ("CONUS") ballistic missile interceptor site. The purpose and need statement identified in Section 1.3 of the DOPAA may be sufficient for NEPA purposes.

The overall project purpose is the key element in that it forms the basis for the alternatives analyses. An alternative is "practicable" if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose (40 CFR §230.3). Only the least environmentally damaging practicable alternative may be permitted. If an alternative is available and meets the overall project purpose, the Corps must consider its practicability; its impact to aquatic resources; and its overall environmental impact. The Corps strongly encourages MDA to frame any analysis of alternatives to include the provisions of the Guidelines.

2. Section 2.3. The missile defense complex at Fort Greely, Alaska is apparently being used as a template for any future complimentary site. While this approach may make sense as a general planning tool, it will be important to consider alternative design concepts that might allow for

greater opportunities to avoid or minimize impacts to environmental resources while still meeting mission critical design elements. The Corps would not want a site dismissed from consideration only because it could not accommodate a generic template. To your credit, the preliminary design for the Maine site appears to 'step outside the box' of the Fort Greely template in light of the site's topographic and other constraints. We encourage the same flexible design considerations throughout the entire alternatives analysis. It will also be important to understand just what are the minimum size and layout spacing requirements (there appears to be a great deal of wasted open space at Fort Greely).

3. Section 2.8. CONUS Interceptor Site Alternatives.

a. The specific siting and/or exclusionary criteria used in identifying alternative sites need to be itemized in the DOPAA and subsequent documentation. Examples might include but not be limited to parcel size, topography, availability of utilities, proximity to transportation networks, and proximity to population centers. The basis for the siting criteria should also be discussed. For example, we understand that one criterion is that a potential site must be collocated with an existing DOD installation. Without further justification, this appears to unreasonably constrain the alternatives analysis and fails to meet the requirements of NEPA and the Guidelines. In Maine for example, the former Loring AFB at Limestone is virtually unused following its closure in 1994 under BRAC. Many of the same strategic and security attributes that made it a key element of the Air Force's Air Combat Command would seem to make it ideally suited for MDA's needs, regardless of non-DOD ownership. Undoubtedly there are similar locations throughout the CONUS.

b. Section 2.10 outlines a sequential approach to the early consideration of other alternatives to the four sites currently on the short list. This section needs to be expanded in far greater detail. What factors were considered to narrow the area of consideration from CONUS to the 28 states depicted on Figure 2.10-1? What factors were considered to narrow the candidates down to the initial five? Why did other candidate sites fail to meet the basic/overall project purpose? One or more comparative matrices might be a useful tool for this section. A matrix might allow the reader (and regulatory agencies) to rapidly compare presumably a much greater list of candidate sites against specific siting criteria. And presumably those siting criteria would include environmental factors.

c. As the potential environmental impacts of the alternative sites are ultimately compared to one another, please ensure that the full scope of direct and secondary impacts is analyzed. For example, development of a complex at Fort Custer in Michigan will apparently require the relocation of an existing 7.62mm rifle firing range. But for the development of the missile defense complex at this site, the rifle range would presumably not have to be moved. So if the relocation of the range will result in environmental impacts, those impacts need to be added to those of the missile defense complex for a full and accurate comparison against the other states' sites.

d. One of the initial five sites, Ethan Allen Firing Range at Jerricho, VT, was subsequently eliminated from further consideration due to insufficient useable land/space to accommodate the missile defense center. Was this determination based on application of the Fort Greely sized template or were alternative configurations also analyzed? Could additional

land have been purchased/leased to overcome this issue? Any time a list of alternative sites is as short as five, a much more detailed discussion of the reasons for dismissal of any of the sites needs to be presented.

e. The discussion of the no build alternative in Section 2.9 could undoubtedly be expanded to address why this alternative fails to meet the project purpose and is contrary to the public interest and our nation's overall security.

f. It is hard to imagine that a complex of the size projected in the DOPAA can be constructed with no impact to aquatic resources. It is therefore presumed that Corps jurisdiction and the need for a permit will be triggered, regardless of the site ultimately selected as 'preferred'. The Corps will require a much more detailed analysis of alternatives than what is framed out in the DOPAA. This will be pivotal to our review of any future permit application. Based on the limited information made available to date, we cannot concur that the DOPAA identifies a reasonable range of alternatives as required by NEPA and the Guidelines. It is in the best interest of the MDA to ensure that future NEPA documentation thoroughly addresses this issue. And adopting the Guidelines in the analysis will help streamline the Corps review process.

g. Once a preferred site is identified, further consideration of alternatives is required in order to avoid or minimize impacts to aquatic and other environmental resources. This further analysis should be future NEPA documentation.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

October 27, 2014

OFFICE OF THE
REGIONAL ADMINISTRATOR

Missile Defense Agency/DPF
Bldg. 5222, Martin Road
Redstone Arsenal, AL 35898
Attn: Mr. Ellis Gilliland, P.E.

RE: EPA Scoping Comments on the proposed Missile Defense Complex Continental United States Interceptor Site (CIS)

Dear Mr. Gilliland:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we submit the following comments as part of the Department of Defense (DOD) Missile Defense Agency (MDA)/Navy NEPA scoping process for the consideration of potential locations for development of a Continental United States Interceptor Site (CIS) to protect the United States. The sites under consideration include the Camp Ravenna Joint Military Training Center in Ohio, Fort Drum in New York, the Fort Custer Training Center in Michigan, and the Navy Center for Security Forces Detachment Kittery Survival, Evasion, Resistance, and Escape Facility in Maine

Our comments are based on information provided in DOD's September 25, 2014 correspondence and Draft Description of Proposed Action and Alternatives (DOPAA). According to that information the objective of the project is to evaluate the impacts at the four sites from construction and operation of a contiguous Missile Defense Complex consisting of an initial deployment of 20 Ground-Based Interceptors (GBIs) with the ability to expand missile fields supporting up to 60 GBIs. Other elements of the CIS site would consist of launch field equipment, missile assembly building and interceptor storage, offices and warehousing. Support infrastructure such as new roads and housing will be needed for approximately 300 personnel. No decision has been made yet as to whether the CIS will be constructed.

The construction and operation of the project could result in range of direct, indirect and cumulative impacts to resources that are within EPA's jurisdiction and expertise. Based on our review of the project information available, we have identified issues we believe should be addressed in the EIS related to alternatives, wetland impacts, water supply, environmental justice, air quality and children's health. Our detailed comments on these issues and project alternatives are attached.

EPA acknowledges the national security objective of the proposed project and offers our comments to assist the MDA in its effort to prepare a comprehensive analysis of potential project

impacts. We encourage the MDA to develop an EIS for the project that addresses the environmental issues articulated in the attachment to this letter.

We are ready to provide assistance to the MDA as appropriate during the preparation of the EIS, and are willing to review draft documents and attend coordination meetings as resources permit. We believe the issues we have identified can be fully addressed in the EIS and we are willing to work with your agency to develop a strategy to achieve that goal. Should you have any questions or wish to discuss our concerns, please contact me at 617/918-1025.

Sincerely,

Timothy L. Timmermann
Associate Director, Office of Environmental Review

Attachment

Detailed Scoping Comments for the proposed Missile Defense Complex Project

Alternatives

The DOPAA notes that a Siting Study was prepared in accordance with MDA policies and that four candidate installations were selected from an initial pool of 457 properties for comprehensive evaluation in the EIS. The DOPAA notes that a summary of the Siting Study is included in Appendix X--which we read to mean that the summary will be included as an appendix to the EIS. If that is the case, we support that approach. The DOPAA also notes that the site selection process applied five exclusionary criteria to narrow down the list of alternatives, but these criteria are not listed or explained. The EIS should provide a complete description of the criteria and how they were applied. In addition, we would also appreciate the opportunity to review the Siting Study in advance of the EIS so we can more fully participate in the evaluation and consideration of alternatives during the NEPA process and pursuant to our responsibilities under Section 404 of the Clean Water Act. Traditionally, we would expect that environmental selection criteria used to help narrow down a range of alternatives under both NEPA and Section 404 would include consideration of potential impacts to: waterways (lakes, ponds, streams); wetlands, including vernal pools; threatened and endangered species/significant wildlife habitat areas; and known historic, archaeological or cultural resources.

The EIS analysis of impacts from development at each of the candidate sites should include a matrix/summary which allows for a meaningful consolidated comparison of the impacts of each alternative to the no-action alternative and relative to each other. This type of analysis will serve NEPA purposes and will provide information relevant to the analysis of alternatives to help determine which is the least environmentally damaging pursuant to Section 404 of the Clean Water Act. The EIS compilation and comparison of impacts is important as development at either the Maine and New York sites has the potential for meaningful wetland impacts. Based on a preliminary GIS-based desktop analysis we found that as much as twenty percent of the Fort Drum, New York site contains wetlands, increasing the likelihood for wetland impacts from the development, while development at the Maine site could impact upwards of 100 acres of wetland. Given these potential impacts, we strongly recommend that the EIS explore the degree to which the layout of essential project elements at each site can be accomplished in a way that avoids and minimizes impacts to wetlands and other site features.

Wetlands

Our comments below provide guidance to the DOD to help scope the analysis of wetland issues in the EIS.

The EIS should provide a detailed description of the wetlands/water bodies and vernal pools for each of the sites under consideration that includes their location as well as an assessment of their functions and values.[1] The EIS should also describe the portions of the construction work that

[1] The alternative sites are located in different regions of the country covered by different US Army Corps of Engineers (Corps) Districts and Guidance. We suggest that the MDA consider this guidance during the preparation of the EIS. For the Maine site, we recommend that the wetland assessment be prepared in a manner consistent with the Corps New England District (formerly the New England Division) descriptive approach to wetland assessment

will involve discharging dredged or fill material in wetlands or other waters of the United States that will be subject to the permit requirements of Section 404 of the Clean Water Act. Discharge activities must comply with EPA regulations issued under Section 404 (b) (1), referred to as EPA's 404 Guidelines (40 CFR Part 230), which require the following: that there be no less environmentally damaging practicable alternative to the proposed action; that the activity not cause or contribute to violations of state water quality standards or jeopardize endangered or threatened species; that the activity not cause or contribute to significant degradation of waters of the United States; and that all practicable and appropriate steps be taken to minimize potential adverse impacts to the aquatic ecosystem (Section 230.10). The guidelines further establish a presumption, which the applicant has an opportunity to rebut, that for projects that are not water-dependent, a practicable alternative to the filling of wetlands exists. As noted above, the EIS should include an evaluation of ways in which each alternative site can be designed to avoid impacts to wetlands.

Unavoidable impacts to wetlands, surface water resources (impacts to rivers/streams quality and flow), and wildlife should be fully disclosed in the EIS. These impacts include but are not limited to: direct filling of wetland for construction and/or operation; temporary impacts to wetlands resulting from access to wetland areas for construction purposes; indirect impacts, such as clearing impacts resulting in a change (either permanent or temporary) of cover type within a wetland (e.g. converting a forested wetland to an emergent or scrub/shrub wetland); indirect impacts resulting from erosion or sedimentation into wetlands or waterbodies; and secondary impacts which can result from construction of the project (i.e. additional development induced by the development of the project). EPA also recommends that the EIS identify appropriate options for compensatory mitigation for unavoidable direct and secondary aquatic impacts and impacts to state and federally listed endangered species. [2] Due to the expected magnitude of wetlands that could be affected by a project at the New York or Maine location, a comprehensive look at impact minimization and mitigation is warranted in the EIS.

In addition, all construction practices that will be utilized to minimize impacts should be documented. Specifically, standard conditions to protect wetlands should be documented in addition to steps that may be taken to reduce impacts to particularly sensitive areas such as vernal pools. The EIS should also provide comprehensive information to explain how work in areas containing steep slopes will be stabilized to prevent erosion and sedimentation impacts to wetlands. In addition, we recommend that the EIS:

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as presented in The Highway Methodology Workbook Supplement Wetland Functions and Values, A Descriptive Approach, NEDEP-360-1-30a, dated November 1995. For New York, we recommend that the Corps New York District general guidance to permit applicants, entitled Modified Functions and Values Assessment for Significant Nexus Determination, dated 9/19/2007, be consulted. The Ohio site is within the regulatory boundaries of the Corps Pittsburgh District. The Michigan site is within the regulatory boundaries of the Corps Detroit District. Those two offices should be contacted for involvement on delineation and permitting for possible impacts to jurisdictional aquatic resources.

[2] The US Army Corps of Engineers New England District Compensatory Mitigation Guidance can be found at : http://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/CompensatoryMitigationGuidance.aspx. Also, the EIS should describe how the project will be consistent with the Corps 2008 Mitigation Rule (also discussed in detail at the Corps website).

- identify any wetlands on the project sites that support rare and exemplary natural communities. If any of these areas exist we recommend that the EIS describe specific mitigative measures to ensure that they will be protected from potential direct, indirect and cumulative impacts. The EIS should also clearly identify the locations of any required access roads, or roads that will need to be improved to support the proposed project, and any impacts to wetland areas and a description of how the wetland ecosystems will be protected from indirect impacts from these roads.

- describe the long-term site maintenance techniques planned for the installation. The discussion should explain whether herbicides will be used and whether specific buffer zones will be established around wetlands where herbicide application would be prohibited. We recommend that the analysis be expanded to discuss the potential for the introduction of invasive species and methods to control their spread as a result of the project.

Construction Period Issues

Erosion/Sedimentation Control

The EIS should discuss measures to prevent erosion and sedimentation during construction and operation of the proposed facilities at each site. The discussion should cover a range of conditions including construction in areas containing steep slopes (such as those found on the Maine site) and spanning normal precipitation levels to severe weather events.

Wetland and Stream crossings

We recommend that the EIS describe all wetland and stream crossings that will be required to facilitate or improve access at the sites under consideration and techniques that can be implemented to avid or minimize the potential for impacts. As noted above, the discussion of proposed crossings should include design factors that address stormwater flows from severe weather events.

Revegetation

The EIS should describe how areas affected by construction of the project will be revegetated to prevent erosion, sedimentation and the proliferation of invasive species. Reseeding of exposed soils with native grasses and/or plants should be performed as soon as possible in accordance with best management practices (BMPs).

Blasting

The EIS should discuss whether blasting will be required for construction of the proposed facility and associated access roads at the alternative sites under consideration. In addition, the analysis should identify and monitor any groundwater wells in the area of the blasting activities and how the water quality or quantity may be adversely affected. The EIS should also discuss the planned follow-up activities should harm to any wells occur.

Air Quality

We recommend that the EIS quantify potential emissions (stationary, area, on-road and non-road emissions) associated with both the construction phase, as well as the day to day operation, of the

proposed Missile Defense Complex. Quantification of emissions at the proposed Missile Defense Complex will assist the host states as they prepare future statewide emission inventories. Franklin County, Maine is currently in attainment for all six criteria pollutants [National Ambient Air Quality Standards (http://epa.gov/air/criteria.html,)]. Hence, the facilities, if located in Redington Township, Maine, would not trigger general conformity or transportation conformity. The Fort Drum site in New York is located within an 8-hr non-attainment area. Therefore, the analysis for this site alternative in the EIS should include a General Conformity analysis. The Ravenna site is in Portage County, Ohio. Portage County is classified as "marginal" non-attainment for the 8-hour ozone standard and a "maintenance" area for the fine particulate (PM 2.5) standard. The Fort Custer site is in Calhoun County, Michigan. Calhoun County is a "maintenance" area for the 8-hour ozone standard.

Regardless of the site selected, EPA's primary air quality concern is related to minimizing construction period emissions through reduced idling, prioritizing the use of new construction equipment meeting the latest emission standards using the use of retrofit emission reduction devices on older construction equipment. We encourage the MDA to specifically address minimizing construction emissions from equipment used to develop the site for its intended use. EPA would like to see the EIS and Record of Decision commit to implementing measures during construction to help reduce and minimize air quality impacts from the construction phase of the proposed project.

These measures could include adding contract specifications that would require construction vehicles and equipment to include retrofit control equipment (oxidation catalysts or particulate filters installed on the exhaust of the diesel engine). The Northeast Diesel Collaborative has prepared model construction specifications which could be used in developing contract specifications for construction of the project. The model construction specifications can be found on the Northeast Diesel Collaborative web site at URL address http://northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf.

Water Supply/Water Resources

As part of the EIS analysis, and to protect existing ground and surface drinking water sources that may exist on or adjacent to the sites under consideration, the MDA should coordinate with the appropriate state and local drinking water programs to identify all drinking water infrastructure, sources and protection areas that could potentially be affected during construction, operation, and maintenance of the proposed project. Information describing all project activities with the potential to contaminate drinking water sources due to spills (e.g. hydraulic fluids) or with the potential to damage drinking water infrastructure (e.g. water mains) should be considered and provided as appropriate to state environmental agencies, towns, and public and private water systems for their review.

Furthermore, a portion of the Appalachian Trail runs along the southern boundary of the Maine site under consideration. A number of streams run through the site and across the trail. These streams could be used as drinking water sources for hikers on the trail. The MDA should identify potential sources used by hikers that could be potentially affected during construction,

operation, and maintenance of the proposed GBI site and should describe measures to address any identified impacts.

Any Spill Prevention, Containment and Countermeasure Plans (SPCC) prepared for the project should include provisions for notification of public water suppliers in the event of a spill during construction or operation of the project. The EIS should also describe existing and proposed activities that occur in drinking water source protection areas, the distance between the proposed activities and those sources and any existing local land use restrictions (health regulations, watershed protection bylaws, etc.) in place for the protection of those water sources.

Water Quality

The EIS should describe how the proposed action alternatives may affect water bodies listed as impaired under Section 303 (d) of the Clean Water Act. We recommend that the EIS discuss existing impairments and how the proposed action may affect impaired water bodies. The EIS should also discuss measures to address anticipated negative impacts. A list of impaired streams can be found at: http://www.epa.gov/waters/ir/index.html.

Impacts to the Appalachian Trail

In addition to the water supply concern noted above, we recommend that the MDA analyze whether development at the Maine project site will negatively affect the viewshed from the Appalachian Trail.

Green Infrastructure

We recommend that the EIS include a discussion of how the recommendations set forth by Titles III, IV, and V of the Energy Independence and Security Act of 2007, and Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (LEED) will be considered during project design and operation. For new structures, we encourage the use of energy-efficient building materials, such as south-facing skylights and windows, motion-sensored lighting, solar and/or geothermal power, and Energy Star certified windows and doors. Section 438 of LEED provides excellent examples of how to implement energy-efficiency into Federal projects.

The EIS should discuss how development and operation at each site will satisfy the requirements of Section 438 of the Energy Independence and Security Act of 2007 with respect to stormwater management. Technical guides and other information regarding compliance with Section 438 can be found on EPA's website.

The DEIS should also describe the percentage of each site to be paved with traditional asphalt or concrete and evaluate the use of permeable pavement as a means of reducing stormwater runoff and increasing groundwater recharge.

Analysis of Indirect and Cumulative Impacts

The Council on Environmental Quality's (CEQ) NEPA regulations require EISs to evaluate growth-inducing changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems that result from the proposed action and alternatives. The regulations define indirect (sometimes called 'secondary') effects as those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." The regulations state that impacts include ecological, aesthetic, historical, cultural, economic, social, or health impacts, whether direct, indirect, or cumulative. The CEQ NEPA regulations define cumulative impacts as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." We are willing to assist the MDA to develop a strategy to address the cumulative impacts of the proposed project.

Connected Actions

The EIS should describe the proposed action, along with all connected actions that are closely related to the proposal and alternatives. EPA is willing to work with the MDA as appropriate to help determine whether any connected actions exist that should be addressed in the EIS.

Environmental Justice

EPA has a strong commitment to promote the principles of environmental justice that are outlined in Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority and Low-Income Populations. According to the Executive Order, "Each Federal Agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by NEPA. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental impacts of proposed Federal actions on minority communities and low-income communities." We encourage the MDA to fully consider whether any of the proposed construction or operation activities on the sites under consideration have the potential to impact environmental justice communities.

EPA defines environmental justice to mean the fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws and policies, and their meaningful involvement in the decision-making process of the government. If the MDA identifies potential environmental justice impacts, it should then determine whether a specific public outreach plan should be developed to communicate with the affected communities. We encourage the MDA to consider the Council on Environmental Quality's (CEQ) "Environmental Justice Guidance under the National Environmental Policy Act" (December 1997) and to consult CEQ's posting of Federal agency resources on environmental justice on its website at:
http://ceq.hss.doe.gov/nepa_information/agency_resources.html.

Children's Health Issues

Executive Order 13045 on Children's Health and Safety directs that each Federal agency shall make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children, and shall ensure that its policies, programs, activities, and standards address these risks.[3] Analysis and disclosure of these potential effects under NEPA is necessary because some physiological and behavioral traits of children render them more susceptible and vulnerable than adults to health and safety risks.

Based on current EPA policy and guidance, an analysis of impacts to children from construction and operation of the proposed project should be included in a NEPA analysis if there is a possibility of disproportionate impact on children related to the proposed action.[4] The MDA EIS should determine whether this might be the case for the project during construction or operation because children can be more susceptible to noise levels, mobile source air pollution, construction dust, and the chemicals associated with building and construction materials. We recommend that the NEPA analysis specifically address the potential direct, indirect, and cumulative impacts of the proposed project on children's health.

EPA can provide guidance to the MDA (through our Children's Environmental Health Coordinators) regarding any questions related to Children's Health issues.

Agency Consultation

EPA recommends that the EIS include consultation documents generated through discussions with other agencies regarding historic resources, wetlands, and Federal and state threatened and endangered species. The EIS should also provide a list of agency contacts from the consultation process.

Related Environmental Documentation

EPA would appreciate internet links to the environmental documents listed on page 1-4 of the DOPAA in advance of the EIS development. We also recommend that these links be provided in the EIS.

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[3] http://yosemite.epa.gov/ochp/ochpweb.nsf/content/whatwe_executiv.htm)

[4] http://www.epa.gov/compliance/resources/policies/nepa/children-health-risks-pg.pdf

United States Department of the Interior

FISH AND WILDLIFE SERVICE

5600 American Boulevard West, Suite 990
Bloomington, Minnesota 55437-1458

IN REPLY REFER TO:

FWS/AES-CPA (ER 14/0437)

SEP 11 2014

Missile Defense Agency/DPF
Bldg. 5222, Martin Road
Redstone Arsenal, AL 35898
ATTN: Mr. Ellis Gilliland, P.E.

Dear: Mr. Gilliland

Subject: Notice of Intent to Prepare an Environmental Impact Statement for the Continental United States Interceptor Site.

This is in regard to the U.S. Department of Defense, Office of the Secretary, Missile Defense Agency's (MDA) Notice of Intent (NOI) to prepare an environmental impact statement (EIS) to evaluate the environmental impacts that could result from the future deployment of the Continental United States Interceptor Site (CIS). If deployed, the CIS would be an extension of the existing Ground-based Midcourse Defense (GMD) element of the Ballistic Missile Defense System that provides protection of the United States from a limited ballistic missile attack.

Under the current proposed action, the deployment of the CIS would be as a contiguous Missile Defense Complex, and would consist of an initial deployment of 20 Ground-based Interceptors (GBIs) with the ability to expand upward to 60 GBIs. The GBIs would not be fired from their deployment site except in the Nation's defense and no test firing would be conducted at the CIS. The overall system architecture and baseline requirements for a notional CIS include, but are not limited to, the GBI fields, Command Launch Equipment, In-Flight Interceptor Communication System Data Terminals, GMD Communication Network, supporting facilities, such as lodging and dining, recreation, warehouse and bulk storage, vehicle storage and maintenance, fire station, hazardous materials/waste storage, and roads and parking where necessary.

Alternatives to be analyzed include the No-Action Alternative and sites at the Combined Training Center Fort Custer–Michigan Army National Guard, Augusta, MI; Camp Ravenna Joint Military Training Center–Ohio Army National Guard, Portage and Trumbull counties, OH; Fort Drum Army Base, Fort Drum, NY; and the Center for Security Forces Detachment Kittery Survival, Evasion, Resistance, and Escape Facility (SERE East), Redington Township, ME.

The following comments are applicable to all potential locations for a CIS project in Ohio, Michigan, New York, and Maine. Comments that pertain to a particular location are identified as such.

AUTHORITY

The U.S. Fish and Wildlife Service (Service) provides the following comments on the proposed project under authority of the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401; 16 U.S.C. 661 *et seq.*) and the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). They are provided in an effort to ensure the protection of fish and wildlife resources through your assessments, investigations, and other planning related to the proposed project, as well as to assist you in complying with acts and executive orders (EOs) addressing fish and wildlife resources, including EO 11990 (Protection of Wetlands) and EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds). These comments do not preclude separate review and comment by the Service as afforded by the FWCA on any permits required from the U.S. Army Corps of Engineers (Corps) pursuant to the Clean Water Act (33 U.S.C. 1344 *et seq.*). Additionally, these comments do not absolve the project proponent from complying with the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712; 40 Stat. 755, as amended) and the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 688-688d, as amended). Compliance with all of these statutes and regulations is required for compliance with the National Environmental Policy Act of 1969 (NEPA) as amended (83 Stat. 852; 42 U.S.C. 4321 *et seq.*).

The Service has special concerns for migratory birds, federally listed endangered and threatened species, and other important fish and wildlife resources. We also are concerned about any impacts on federal and state wildlife refuges and management areas and other similar public lands, as well as to other areas that support sensitive habitats. Habitats frequented by important fish and wildlife resources include wetlands, streams, riparian (streamside) woodlands, forests, and native grasslands. We give special attention to projects that propose modification of wetlands, stream alteration, impacts to federally listed or other rare species and their habitats, alteration of large contiguous tracts of forested habitats, or could result in contamination of important habitats. The Service recommends ways to avoid, minimize, rectify, reduce, or compensate for adverse impacts to important fish and wildlife resources and their habitats that may be attributed to land and water resource development proposals.

FEDERALLY LISTED SPECIES AND CRITICAL HABITATS

Pursuant to Section 7(a)(2) of the ESA, every federal agency, in consultation with the Service, is required to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any federally listed species and/or result in destruction or adverse modification of designated critical habitat. Pursuant to Section 7(a)(4) of the ESA, federal agencies are also required to confer with the Service if they determine their action is likely to jeopardize the continued existence of any federally proposed species or critical habitat.

In this case, the MDA should determine if any federally listed or proposed threatened or endangered species and/or designated/proposed critical habitat would be directly and/or indirectly affected by the proposed project. The assessment of potential impacts (direct and indirect) must include an "affect" or "no effect" determination and be presented to the Service in writing. If the Service agrees with a determination of "not likely to adversely affect" made by the federal agency, we will provide a letter of concurrence. If MDA makes a "no effect" determination, no concurrence from the Service is necessary and, to reduce workload on Service staff, no letter of concurrence will be provided. If federally listed species and/or designated critical habitat are likely to be adversely affected by this action, the MDA will need to formally request further section 7 consultation with the Service prior to making any irretrievable or

irreversible commitment of federal funds (Section 7(d) of the ESA), or issuing any federal permits or licenses. Since other federal action agencies, such as the Corps, may be involved with the CIS, it may be necessary for the MDA to coordinate with these agencies to designate a lead agency for the purposes of Section 7 consultation.

In accordance with Section 7(c) of the ESA, we have determined that the federally listed, proposed, and candidate species identified below are known to occur or are likely to occur at the four potential CIS locations in Michigan, Ohio, New York, and Maine. Where applicable, we also identify the presence of designated or proposed critical habitat for each potential project area.

LISTED SPECIES COMMENTS

Indiana bat (Myotis sodalis)

Since first listed as endangered in 1967, the population of the Indiana bat (Myotis sodalis) has declined by nearly 60 percent. Several factors have contributed to the decline of the Indiana bat, including loss and degradation of suitable hibernacula, human disturbance during hibernation, pesticides, and loss and degradation of forested habitat, particularly stands of large, mature trees. Fragmentation of forest habitat may also contribute to declines. During winter, Indiana bats hibernate in caves and abandoned mines. Summer habitat requirements for the species are not well defined but the following are considered important:

(1) dead or live trees and snags with peeling or exfoliating bark, split tree trunk and/or branches, or cavities, which may be used as maternity roost areas;
(2) live trees (such as shagbark hickory and oaks) which have exfoliating bark;
(3) stream corridors, riparian areas, and upland woodlots which provide forage sites.

All projects in the State of Ohio lie within the range of the Indiana bat. Although suitable Indiana bat habitat occurs at Camp Ravenna, summer surveys in 1999, 2002, 2005, and 2010 following Service Indiana Bat Summer Survey Protocols have not documented any Indiana bats at Camp Ravenna. Therefore, it is unlikely that Indiana bats occur at Camp Ravenna based on the results of these past survey efforts. There is presently no designated or proposed critical habitat in the project area alternative at Camp Ravenna.

The Combined Training Center at Fort Custer in Michigan also lies within the range of the Indiana bat. The last reported survey efforts at the Combined Training Center Fort Custer were conducted in 2005 and no Indiana bats were detected. Given the time period since the last survey and the presence of suitable Indiana bat habitat at the site, we recommend surveys be repeated following Service Indiana Bat Summer Survey Protocols.

Canada lynx (Lynx canadensis)

The SERE East facility in Maine is within the range of the Canada lynx (Lynx canadensis), a federally threatened species. The facility, however, is not located within designated critical habitat for lynx in Maine. We are not aware of any lynx observations on the SERE East property but lynx are known to occur in surrounding townships. Winter track surveys, if not already completed by the Navy, would help in determining if lynx are present on the SERE East property. A desk-top assessment of habitat using recent aerial photography would also help to determine if suitable lynx habitat is present or may develop in the future. If either of these

studies have not already been conducted by the Navy in recent years, the Maine Field Office can be contacted for guidance on how to perform a winter track survey or a lynx habitat assessment (please contact Mark McCollough, 207-866-3344 or mark_mccollough@fws.gov).

Atlantic salmon (Salmo salar)

Approximately the eastern two-thirds of the SERE East property occurs within the geographic range of the Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic salmon (Salmo salar), a federally endangered species under the joint jurisdiction of the Service and the National Marine Fisheries Service (NOAA Fisheries Service) (74 FR 29344; June 19, 2009). The Atlantic salmon GOM DPS encompasses all naturally spawned and conservation hatchery populations of anadromous Atlantic salmon whose freshwater range occurs in the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River and wherever these fish occur in the estuarine and marine environment. The upstream extent of the freshwater range of the GOM DPS is delimited by seven impassable natural falls located within the Androscoggin, Kennebec, and Penobscot drainages.[1] Also included in the GOM DPS are all associated conservation hatchery populations used to supplement natural populations. Excluded are landlocked salmon (also Salmo salar) and those Atlantic salmon raised in commercial hatcheries for aquaculture purposes.

On June 19, 2009, the NOAA Fisheries Service designated critical habitat for listed Atlantic salmon pursuant to section 4(b)(2) of the ESA[2]. The critical habitat designation for the GOM DPS includes 45 specific areas occupied by Atlantic salmon at the time of listing that include approximately 12,161 miles of perennial river, stream, and estuary habitat and 308 square miles of lake habitat within the range of the GOM DPS and within which are found those physical and biological features essential to the conservation of the species. These essential features of critical habitat are referred to as primary constituent elements (PCEs).

Critical habitat for Atlantic salmon includes two PCEs as follows: 1) sites for spawning and rearing and 2) sites for migration. All designated critical habitat is occupied by endangered

Atlantic salmon at the HUC[3]-10 watershed level, although not all water bodies within a given watershed are necessarily occupied by Atlantic salmon at any given time.

That portion of the SERE East property that is within the range of the GOM DPS is also within designated critical habitat for salmon, to include all perennial streams and connected ponds and lakes. Water bodies that are critical habitat for salmon include Orbeton Stream and its perennial tributaries.

Currently, the Sandy River watershed is the focus of recovery efforts for Atlantic salmon in the Merrymeeting Bay Salmon Habitat Recovery Unit. Orbeton Stream is an important tributary of the Sandy River and provides excellent habitat for salmon. In recent years, egg planting in Orbeton Stream has been successful in producing juvenile salmon. Adults translocated from the Kennebec River into the Sandy River, have spawned in lower section of Orbeton stream.

[1] See the final rule listing the Gulf of Maine Distinct Population Segment as an endangered species for the specific locations of the seven impassable falls (74 FR 29346; June 19, 2009).
[2] The designation of critical habitat for Atlantic salmon was revised on August 10, 2009 (74 FR 39903).
[3] HUC = hydrologic unit code as defined by the U.S. Geological Survey.

Currently, salmon populations throughout the GOM DPS are at critically low levels. Consequently, protection of the Sandy River and its tributaries, including Orbeton Stream, is a high priority for the Service in ongoing efforts to recover the endangered Atlantic salmon. Protection of riparian buffers and ensuring fish passage and natural stream function are important considerations as we work towards salmon recovery. Where road-stream crossings cannot be avoided, the Service recommends that all crossing structures be designed using the U.S. Forest Service's Stream Simulation methodology to ensure aquatic organism passage and maintenance of natural stream functions (USDA-FS 2008).

PROPOSED SPECIES COMMENTS

Northern long-eared bat (Myotis septentrionalis)

All proposed alternatives lie within the draft range of the northern long-eared bat (Myotis septentrionalis), a species that is currently proposed for listing as federally endangered under the ESA. The final listing decision for the northern long-eared bat will occur no later than April 2, 2015. No critical habitat has been proposed at this time. Recently white-nose syndrome (WNS), a novel fungal pathogen, has caused serious declines in the northern long-eared bat population in the northeastern U.S. WNS has also been documented in Ohio, Michigan, New York, and Maine but the full extent of the impacts from WNS in these states is not yet known.

During winter, northern long-eared bats hibernate in caves and abandoned mines. Summer habitat requirements for the species are not well defined but the following are considered important:

(1) Roosting habitat in dead or live trees and snags with cavities, peeling or exfoliating bark, split tree trunk and/or branches, which may be used as maternity roost areas;
(2) Foraging habitat in upland and lowland woodlots and tree lined corridors;
(3) Occasionally they may roost in structures such as barns and sheds.

As stated previously, pursuant to section 7(a)(4) of the ESA, federal action agencies are required to confer with the Service if their proposed action is likely to jeopardize the continued existence of the northern long-eared bat [50 CFR 402.10(a)]. Federal action agencies may also voluntarily confer with the Service if the proposed action may affect a proposed species. Nevertheless, species proposed for listing are not afforded protection under the ESA; however as soon as a listing becomes effective, the prohibition against jeopardizing its continued existence and "take" applies regardless of an action's stage of completion. If the MDA retains any discretionary involvement or control over on-the-ground actions that may affect the species after listing, section 7 applies.

Northern long-eared bats have been captured during surveys at Camp Ravenna in 1999, 2002, 2005, and 2010. Therefore, we recommend that trees exhibiting any of the characteristics listed above, as well as any wooded areas or tree lined corridors, be saved wherever possible. If any caves or abandoned mines may be disturbed, further coordination with the Columbus, Ohio, Ecological Services Field Office is requested to determine if fall or spring surveys are warranted. If no caves or abandoned mines are present and trees must be cut, at a minimum we recommend that any tree removal occur between October 1 and March 31 to avoid direct impacts to northern long-eared bats. Incorporating these conservation measures into your project at this time may avoid significant future project delays should the listing become

official. Due to the amount of forested habitat that could be removed for the Camp Ravenna alternative, formal consultation may be necessary if this alternative is chosen and the species is listed under the ESA.

The last reported surveys at the Combined Training Center Fort Custer in Michigan were conducted in 2005 and no NLEB were detected. Given the time period since the last survey and the presence of suitable NLEB habitat at the site, we recommend surveys be repeated following Service Indiana Bat Summer Survey Protocols.

Although we have not yet seen survey results, we understand that the Department of the Navy (Navy) detected the presence of northern long-eared bats at SERE East during acoustic surveys conducted during the summer of 2013. A rare mammal survey of the Maine Appalachian Trail (AT) conducted by the National Park Service in summer 2006 documented the presence of Northern long-eared bats (Yates et al. 2010). This bat species was captured at six of seven mist net survey sites along the AT, including 3 survey locations in Franklin County near the SERE East property. Information on the occurrence of the northern long-eared bat in Maine since the occurrence of WNS in 2011 is relatively scarce.

Given that the SERE East property is largely forested, development of a CIS facility would likely result in impacts to northern long-eared bat habitat. Since the SERE East property has not had any timber management activities on it for several decades, this area may represent an important component of relatively natural bat habitat in a western Maine landscape that is otherwise subject to substantial timber management activities. Should the SERE East facility be selected as a location for a CIS, we recommend that the MDA coordinate with the Service as soon as possible to discuss whether additional studies may be warranted to facilitate section 7 consultation if the northern long-eared bat were to become federally listed. For example, radio tracking and emergence surveys could be very useful in understanding how northern long-eared bats are using the landscape at SERE East and surrounding areas and analyzing the effects of a CIS project.

OTHER RARE SPECIES COMMENTS

Bicknell's Thrush (Catharus bicknelli)

The Bicknell's thrush (Catharus bicknelli) is currently under review by the Service for possible listing under the ESA. On August 15, 2012, the Service published a positive 90-day finding in response to a 2010 petition to list the Bicknell's thrush as a threatened or endangered species.

Bicknell's thrush occurs in high elevation habitats in western Maine, often dense, stunted forests of balsam fir and red spruce and may be present on the SERE East property. We recommend that the MDA assess the occurrence of appropriate habitat for this species and conduct breeding season surveys to help determine whether or not this species is present and could be impacted by a CIS project. Avoidance of impacts to this declining species and its habitat should be a priority for the MDA in considering possible locations for a CIS.

AFFECT/NO EFFECT DETERMINATION

The Service recommends that the MDA consider the information provided previously to assess potential impacts of the proposed project on federally listed species and designated critical habitat and in making the "affect/no effect determination." Further, the Service recommends

that the MDA not limit its consideration of effects to just this information but also consider other potential effects, including effects of other activities that are interrelated or interdependent, as they become apparent during the course of other project studies and/or project development and modification. An option to consider is to delay Section 7 consultation until a preferred alternative(s) is selected and once it appears that a project is actually moving forward

We also encourage MDA to consider opportunities to address ESA section 7(a)(1) responsibilities related to the recovery of federally listed species, should the CIS project move forward. Such opportunities could include habitat protection, habitat enhancement or restoration, and research projects to address outstanding information needs.

BALD AND GOLDEN EAGLE PROTECTION ACT (BGEPA)

Although no longer protected under the federal ESA, bald and golden eagles remain protected under the BGEPA, which prohibits anyone from "taking" eagles. Among other actions, "take" includes disturbance of eagles. Information from previous projects in this area indicates that there may be bald eagle nesting sites in the vicinity of the project corridor. It is the project proponent's responsibility to minimize or avoid impacts. The Service has developed guidance for avoiding disturbance to bald eagles during nesting. This guidance is available at Region 3's "Bald Eagle Management Guidelines & Conservation Measures" web site at http://www.fws.gov/midwest/eagle/guidelines/index.html.

This website steps project proponents through the Bald Eagle Management Guidelines so that they can determine whether their activities may disturb nesting bald eagles and, thus, possibly be in violation of the BGEPA. The step-by-step guidance on this website is specific to bald eagles in the states within Region 3 of the Service. If needed, MDA should be prepared to conduct surveys for active and alternate bald eagle nests to ensure that the intent of the BGEPA can be met. Camp Ravenna has had an active bald eagle nest on base since 2010.

As of the 2013 nesting season, there are no known bald eagle nests on or near SERE East. The likelihood of a bald eagle nest is low given the lack of larger water bodies on the facility. Maine historically supported nesting golden eagles. Although golden eagles are not known to have nested in Maine since 1999, golden eagles have been observed during the nesting season in more recent years. Currently, Maine may host very small numbers of golden eagles in all seasons. The SERE East property may contain suitable nesting habitat associated with cliffs. The EIS should consider the potential for a CIS project to impact golden eagle nesting opportunities at the SERE East property.

STREAM, RIPARIAN, AND WETLAND HABITAT COMMENTS

The Service recommends that proposed activities minimize water quality impacts and impacts to quality fish and wildlife habitat, such as forests, streams, and wetlands. Riparian zone habitat should be preserved wherever possible. Vegetated areas along streams and rivers stabilize the banks, provide fish and wildlife habitat, filter pollutants and excess nutrients, store excess water during storm events, and minimize sedimentation. Best Management Practices (BMPs) should be utilized to minimize sedimentation and erosion. All disturbed areas should be mulched and revegetated with native woody and herbaceous species.

The Service also recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat, such as forests, streams, and wetlands. Best construction techniques should be used to minimize erosion, in particular, on slopes. Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, MDA should contact the Corps for possible need of a Section 404 permit; in Michigan, MDA should contact the Michigan Department of Environmental Quality. We support and recommend mitigation activities that reduce the likelihood of invasive plant spread and encourage native plant colonization. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats. All disturbed areas in the project vicinity should be mulched and revegetated with native plant species.

Fort Custer is known to support wetland community types unique to Southern Michigan, including fens. These groundwater-dependent wetlands often support rare species. Although previous surveys have not document the presence of any federally listed species in these wetlands, we recommend further surveys be conducted. We also suggest that MDA consider potential impacts of the project on groundwater flow and quality.

Information on the occurrence of wetlands within the project area may be obtained from the relevant National Wetlands Inventory (NWI) map. The Service has the primary Federal responsibility for mapping and maintaining an inventory of wetlands in the United States. These NWI maps provide information on wetland type, location, and size and can assist you in analyzing the effect of your project. However, these maps may not necessarily provide information on the extent of wetlands regulated under state or local authority or regulated by the Corps under the Rivers and Harbors Act of 1899 and the Clean Water Act of 1977. In Maine, for example, NWI maps are known to under-represent the presence of forested wetlands, particularly in areas of coniferous and mixed forests. Therefore, MDA should be aware that wetland impacts at some proposed CSI sites may be greater than anticipated based only on consideration of NWI data.

We recommend that MDA map the locations of vernal pools on the SERE East facility based on the appropriate survey window during the amphibian breeding season (.http://www.maine.gov/dep/land/nrpa/vernalpools/timing.pdf; accessed September 5, 2014). Because of their small size and temporary nature, vernal pools are an often over-looked wetland resource in Maine. The amphibian and invertebrate production of vernal pools provides an abundant source of prey for a wide variety of migratory birds and other wildlife species. The MDA should consider the protection of vernal pools and their associated critical terrestrial habitat in the selection of a preferred CIS. In Maine, the Service recommends following the guidelines of Calhoun and Klemens (2002) to minimize impacts to vernal pools and critical terrestrial habitat if impacts cannot be avoided altogether.

NWI maps can be acquired from the appropriate state distribution center, one of six U.S. Geological Services (USGS) Earth Science Information Center regional offices, or by calling the USGS national toll-free number: 1-800-USA-MAPS. Maps can also be viewed at the Library of Congress and the Federal Depository Library System and, where available, downloaded cost-free through the NWI Home Page on the Internet at http://www.nwi.fws.gov.

MIGRATORY BIRD COMMENTS

Construction activities in grasslands, wetlands, forests, and riparian habitats have the potential to result in the taking of migratory birds, eggs, young, and/or active nests if the activities are conducted during the nesting period. The Migratory Bird Treaty Act prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior.

Most migratory bird nesting activity in the project area occurs from approximately mid-April through late July, although some migratory bird species are known to nest outside of the aforementioned primary nesting season period. For example, eagles and some other raptors may begin nesting as early as February, whereas sedge wrens, which occur in some wetland habitats, may be found nesting up to mid-September.

If the construction of the project is planned to occur during the primary nesting season or at any other time which may result in the take of nesting migratory birds, the Service recommends that the project proponent arrange to have a qualified biologist conduct a field survey of the affected habitats and structures to determine the absence or presence of nesting migratory birds. Surveys must be conducted during the nesting season. The Service further recommends that field surveys for nesting birds, along with information regarding the qualifications of the biologist(s) performing the surveys, be thoroughly documented and that such documentation be maintained on file by the project proponent until such time as construction on the proposed project has been completed.

Fort Custer is known to support a population of cerulean warblers (Dendroica cerulean). Although cerulean warblers are not currently listed under the ESA, the species has been identified as one of conservation concern. Potential impacts to this species should be evaluated in the preparation of the EIS.

NORTHERN FOREST LANDSCAPE CONSERVATION PLANNING EFFORTS IN MAINE

The Service is currently working with numerous conservation partners on conservation opportunities in the High Peaks region of Maine. This effort has been ongoing for several years on the invitation of local conservation groups. The Service is concerned about the selection of the SERE East facility as a CIS location and how it may impact conservation efforts and fish and wildlife habitat in the High Peaks region.
The High Peaks region of Maine is a unique area. Ten of Maine's 14 mountains with summit elevations above 4,000 feet occur here, with eight of those 14 in close proximity to the SERE East property. The terrain is generally mountainous and steep. The unique and rare assemblage of habitats found here provides a critical link that will allow for migration and adaptation of species affected by climate change. The SERE East facility is centrally located with "Mt. Abraham-Saddleback-Crocker Mountains" Beginning with Habitat Focus Area. Beginning with Habitat is a Maine-wide collaboration of government agencies at all levels, as well as nongovernmental organizations, to target conservation of wildlife and plant habitats at a landscape scale. A large, contiguous block of the region's forested habitat was designated as a Tier 1 (highest rank) matrix forest block by The Nature Conservancy because it provides habitat of sufficient size to support wide-ranging and interior forest-dependent wildlife difficult to maintain elsewhere.

The region also provides habitat for many "highest" and "high" priority Bird Conservation Region (BCR) 14 forest-interior breeding bird species, including American black duck, American woodcock, bay-breasted warbler, Bicknell's thrush, black-throated blue warbler, Canada warbler, Cape May warbler, chestnut-sided warbler, eastern wood peewee, olive-sided flycatcher, purple finch, rusty blackbird, veery, wood thrush, and yellow-bellied sapsucker. Other boreal species found in the region include gray jay, blackpoll warbler, boreal chickadee, and black-backed woodpecker. Additionally, this area supports another 40 bird species and 13 other animal species listed in the Maine Wildlife Action Plan, 10 of which are listed by the State as "special concern." The area is also designated as a "landbird focus area" by BCR 14.

The habitats found in the Maine High Peaks are not well represented in the existing conservation lands network of the Eastern United States. Management of these habitats is essential for several species of conservation concern, as well as for facilitating resiliency and adaptability of species to climate change. Conservation in the High Peaks region would complement national and international conservation efforts in the Northern Forest, and likely benefit many Federal trust resources, including migratory birds.

The proposal area has received additional recognition in several state, regional, or international initiatives. The High Peaks region is within the Western Mountains and Lakes Pilot Area, one of two potential pilot project areas, of the State's Keeping Maine's Forests program. This program involves a broad-based coalition of landowners, mills, conservationists, sporting and recreational interests, tribal nations, and local communities, joined together in an effort to conserve forests and maintain a vibrant forest products industry. The Maine High Peaks region also falls within the Vermont Northeast Kingdom - Northern New Hampshire -Western Maine Mountains high-priority linkage for wildlife movement identified in the Staying Connected initiative, a multi-state "collaboration of twenty public and private entities working together to maintain landscape connections across the Northern Forest region."

The SERE East property is located within published connectivity models for the Two Countries One Forest project, an international organization dedicated to using landscape conservation to protect and maintain the Northern Appalachian/Acadian ecoregion. This recognition emphasizes the area's importance for connecting wildlife to protected lands across the two country landscape, which includes 80 million acres and forests spanning the eastern edge of North America. The High Peaks region also falls within the Wildlands Network Design for the Greater Northern Appalachians as a "proposed secondary core area." The Wildlands Network is an international conservation organization engaged in large-scale regional conservation planning to identify areas in need of protection, focusing specifically on habitat connectivity across state and national boundaries. Core protected areas are highly irreplaceable areas of concentrated conservation value.

The SERE East facility as it is currently used by the Navy contains mature forested habitats that have not been harvested since the establishment of the SERE school. As such, this large contiguous block of mature forest with minimal development is now consistent with many of the conservation efforts discussed above. The age and composition of these forested habitats provides a unique opportunity in the High Peaks region of Maine to work toward an old growth or climax forest condition that is valuable for many fish and wildlife species. Additionally, the SERE East forested habitats are contiguous and are at the heart of a larger contiguous forest which is critical for management of forest interior bird species and wide-ranging mammals like moose and Canada lynx. We request that the MDA seriously consider how a CIS would

fragment the existing forest habitat and impact the variety of fish and wildlife species that are currently thriving in this region of Maine, as well as impact several ongoing conservation efforts.

We recommend that the project be coordinated with the respective state natural resource agencies due to the potential for the project to affect resources of concern to the states.

Thank you for the opportunity to review the Notice of Intent and to provide these comments.

Sincerely,

Lynn M. Lewis

Lynn M. Lewis
Assistant Regional Director
Ecological Services

cc: Nathan Reardon, ODNR-DOW, nathan.reardon@dnr.state.oh.us
Jennifer Norris, ODNR-DOW, jennifer.norris@dnr.state.oh.us
Dan Kennedy, MI DNR, kennedyd@michigan.gov
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United States Department of the Interior

FISH AND WILDLIFE SERVICE
3817 Luker Road
Cortland, NY 13045

October 27, 2014

Mr. Ellis Gilliland, P.E.
Missile Defense Agency/DPF
Bldg. 5222, Martin Road
Redstone Arsenal, AL 35898

Dear Mr. Gilliland:

This is in regard to the U.S. Department of Defense, Office of the Secretary, Missile Defense Agency's (MDA) proposed future deployment of the Continental United States Interceptor Site (CIS). If deployed, the CIS would be an extension of the existing Ground-based Midcourse Defense (GMD) element of the Ballistic Missile Defense System that provides protection of the United States from a limited ballistic missile attack.

Under the current proposed action, the deployment of the CIS would be as a contiguous Missile Defense Complex, and would consist of an initial deployment of 20 Ground-based Interceptors (GBIs) with the ability to expand upward to 60 GBIs. The GBIs would not be fired from their deployment site except in the Nation's defense and no test firing would be conducted at the CIS. The overall system architecture and baseline requirements for a notional CIS include, but are not limited to, the GBI fields, Command Launch Equipment, In-Flight Interceptor Communication System Data Terminals, GMD Communication Network, supporting facilities, such as lodging and dining, recreation, warehouse and bulk storage, vehicle storage and maintenance, fire station, hazardous materials/waste storage, and roads and parking where necessary.

Alternatives to be analyzed include the No-Action Alternative and sites at the Combined Training Center Fort Custer–Michigan Army National Guard, Augusta, MI; Camp Ravenna Joint Military Training Center–Ohio Army National Guard, Portage and Trumbull Counties, OH; Fort Drum Army Base (Fort Drum), Fort Drum, NY; and the Center for Security Forces Detachment Kittery Survival, Evasion, Resistance, and Escape Facility (SERE East), Redington Township, ME.

The following comments are provided pursuant to the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). This response does not preclude additional U.S. Fish and Wildlife Service (Service) comments under other legislation. These comments serve as an addendum to the Service's comments provided in our September 11, 2014, letter and are specific to the proposed alternative at Fort Drum.

As you are aware, there is one federally-listed endangered species, the Indiana bat (*Myotis sodalis*), and one species the Service has proposed listing as an endangered species, the northern long-eared bat (*Myotis septentrionalis*) known to occur at Fort Drum. Staff from the Service's New York Field Office and Fort Drum met with your staff earlier this year to discuss these species. There is presently no designated or proposed critical habitat in the project area alternative at Fort Drum. We look forward to continuing discussions with the MDA about these species and the proposed project.

We recommend that any information about the Fort Drum alternative be discussed with the New York State Department of Environmental Conservation.

Thank you for your time. If you require additional information please contact Robyn Niver at (607) 753-9334.

Sincerely,

for Patricia Cole
David A. Stilwell
Field Supervisor

cc: NYSDEC, Watertown, NY (Env. Permits, Wildlife)
Fort Drum Military Installation, Fort Drum, NY (J. Wagner)
U.S. Fish and Wildlife Service, Minneapolis, MN (R. Kryska)

United States Department of the Interior

NATIONAL PARK SERVICE
Appalachian National Scenic Trail
P.O. Box 50 (Deliveries: 252 McDowell St.)
Harpers Ferry, WV 25425

IN REPLY REFER TO

1.A.1

November 14, 2014

Missile Defense Agency/DPF
Bldg. 5222, Martin Road
Redstone Arseral, AL 35898
ATTN: Mr. Ellis Gilliland, P.E.

Subject: Department of Defense, Missile Defense Agency (MDA) Notice of Intent to Prepare and Environmental Impact Statement (EIS), Continental United States Interceptor Site, OH MI, NY ME

To the Missile Defense Agency:

The National Park Service (NPS) Appalachian National Scenic Trail (AT) appreciates the opportunity to review and comment on the Draft Description of Proposed Actions and Alternatives (DOPAA) for the Continental United States (CONUS) Interceptor Site (CIS). The Department of Defense (DOD) has requested that the NPS identify resources within its purview that may be potentially impacted. The MDA has chosen four sites for potential development of the CIS: Fort Custer Training Center, Michigan, Camp Ravenna Joint Military Training Center, Ohio, Fort Drum, New York, and the Center for Security Forces Detachment Kittery Survival, Evasion, Resistance and Escape Facility (SERE East), Redington Township, Maine. The Trail is located immediately adjacent to the SERE East location. The National Park Service offers the following comments for your consideration.

Appalachian National Scenic Trail, Background

The Appalachian National Scenic Trail, a 2,185 mile long footpath that traverses the scenic, wooded, pastoral, wild, and culturally resonant lands of the Appalachian Mountains, was conceived in 1921 and originally built and maintained by a consortium of agencies and private citizens. Congress officially recognized the national significance of the trail and designated it a National Scenic Trail in 1968, as one of two initial components of the National Trails Systems Act (16 U.S.C. 12 41, 1244(a), NTSA). The NTSA defines national scenic trails and sets criteria for establishment of such trails through the Act:

> ".....trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. National scenic trails may be located so as to represent desert, marsh, grassland,

mountain, canyon, river, forest, and other areas, as well as landforms which exhibit significant characteristics of the physiographic regions of the Nation."

The Appalachian National Scenic Trail is currently protected along more than 99 percent of its course by federal or state ownership of the land or by rights-of-way and is a unit of the National Park Service. Throughout its course, it is managed by the NPS, U.S. Forest Service, Appalachian Trail Conservancy, numerous state agencies and thousands of volunteers. More specifically, the Maine section referenced within this letter includes some of the earliest developed sections of the trail in Maine, where the AT was first completed in August 1937 on Spaulding Mountain, immediately to the east of the SERE tract. These lands are managed directly by the NPS in cooperation with the State of Maine, the Appalachian Trail Conservancy and the Maine Appalachian Trail Club.

The AT in Maine extends for 281 miles from its north terminus at the summit of Katahdin within Baxter State Park, southwest to the New Hampshire state border. Significantly, Maine has the third longest portion of the AT among the 14 states that it traverses and has steep, rocky, undulating terrain with 36 major peaks. Expansive views from summits include panoramas of surrounding mountains with sizeable lakes at their bases. Sections of the AT along ridgelines and adjacent to lakes have a feeling of vast openness. Several gorges and waterfalls along the trail contribute to its natural scenic quality. The southern 113 miles of the AT through Maine, which includes the SERE East facility, is noted as the "High Peaks" region and contains Bigelow and Saddleback Mountains, reaching approximately 4,000 feet and forming a rigorous course of steep climbs and descents. The area includes some of the most scenic and remote sections of the AT along the entire route from Maine to Georgia, that overlook alpine landscapes second only to Katahdin in scenery or extent in the State of Maine.

National Historic Preservation Act (NHPA), Section 106

The National Park Service will want to participate as a consulting party in the Section 106, National Historic Preservation Act process, once the formal process begins. The AT comprises a continuous linear Historic District eligible for listing in the National Register of Historic Places (NRHP). At present, the NPS is finalizing documentation to formally list the AT on the NRHP and will want to participate in the evaluation of the AT for the Section 106 process. As discussed in further detail below, the trail itself, its structures and cultural landscapes, viewpoints and vistas, and its natural setting are all vital elements to the Historic District's national significance as a recreational resource and to its NRHP eligibility and the NPS has documentation and expertise that will provide valuable information and insight to the Section 106 analysis.

Overall Concerns

According to the DOPAA, the underlying purpose and need to which the agency is responding, is that it needs to decide "whether and where to deploy a CIS." The deployment decision will be based on, among other factors, the ballistic missile threat to the U.S., site constructability, affordability, and potential environmental impacts. With regard to the need for a CIS, it is relevant to note that the MDA has stated in the DOPAA that it believes that "the existing Ground Based Interceptor (GBI) sites at Fort Greely, Alaska and Vandenberg Air Force Base, California provide the capability to protect the United States (U.S.) from current and future threats should

:hey emerge." The NPS recommends clarification in the EIS of the purpose and need for the proposed CIS deployment.

Based on the information provided here and within the scoping comments of our partner, The Appalachian Trail Conservancy, we believe it possible to remove the SERE East location alternative from further analysis. The steep, rocky terrain, the remote nature of the area, the lack of suitable infrastructure to transport, store and maintain the CIS related components, as well as the lack of "non-mission facilities" and services, combine to make this site an unreasonable alternative.

Should analysis of this alternative move forward in an EIS, NPS has overall concerns with potential impacts to resources identified as contributing to its status as a National Scenic Trail, as sited in the NTSA. We recommend assessment of the significance of those impacts within the general context of the proximity of this proposal to the AT, and the large-scale character of this development in this nearly pristine environment. The proposed project is located immediately adjacent to the AT within an area of the region that has remained unspoiled by development, and which includes a roughly 20-mile section of AT without a single sanctioned road crossing. A significant amount of investment will be needed to accommodate the CIS and related facilities, including expansion of road capacity to accommodate the transportation of equipment and missiles, and development of housing and other "non-mission facilities" which will require utilities, waste disposal, and water treatment systems, among other services. We recommend a careful analysis in the EIS of the cumulative and long-term impacts to the AT from such infrastructure. For example, road crossings of the trail incrementally degrade the AT over the entire course of the trail and fragment the remote wilderness experience for hikers. Introduction of new and larger roads will also increase surface water run-off and degrade water quality, increase noise, and could potentially damage the footpath itself, by inviting the use of unsanctioned vehicles such as ATVs.

Specific Concerns

Our goal is to assist the MDA in analyzing impacts to the AT as part of the NEPA process and to inform the assessment of effects to cultural resources and historic properties of the AT as part of the NHPA. The *Appalachian Trail Resource Management Plan* (2008) documents the Appalachian National Scenic Trail's natural and cultural resources and describes and sets priorities for management, monitoring, and research programs to ensure that these resources are properly cared for and protected. Management objectives outlined in the Resource Management Plan are consistent with the *Appalachian Trail Comprehensive Plan* (1981, re-affirmed 1987), the *Appalachian Trail Statement of Significance* (2000), and the *Appalachian Trail Strategic Plan* (2001, updated 2005). These objectives also are based on the resource protection mandates stated in the NPS Organic Act of 1916 and the trail's enabling legislation, the NSTA. The National Register of Historic Places' Multiple Property Documentation Form (Draft, 2014) provides detailed information regarding the Trail's NRHP eligibility and significant cultural resources. Based on this information, the NPS wishes to provide the following summary of AT resources potentially impacted by the proposed project.

The following sections describe some of those interests relative to the Appalachian National Scenic Trail. This information is not exhaustive, and the NPS expects to provide further assistance and review of relevant information as development of the EIS moves forward.

Furthermore, our partner, the Appalachian Trail Conservancy (ATC) will also provide substantive comments to MDA on potential impacts to the AT from this project and the DOPAA, and the MDA should consider ATC's input as complimentary to the NPS comments herein.

Cultural Resources

In general, analysis should be undertaken and include potential adverse effects to the footpath itself, structures, archaeological sites, and viewpoints and vistas which are located along the Trail within the proposed Historic District. The cumulative, direct and indirect adverse effects from lighting on the wilderness experience should also be considered. The broad setting of the AT which includes cultural landscapes, and an array of natural and cultural resources, would also be evaluated. According to the Multiple Property Documentation Form (MPDF), "the AT's essential function is to provide a pathway to reach and experience the remote, natural, wild, scenic and cultural lands along the Appalachian Mountain Chain" and this setting is vital to the AT Historic District's ability to convey its historical associations for NRHP eligibility. We recommend an evaluation of the setting based on the National Register Bulletin 15, page 45, which states that:

> "Whereas location refers to the specific place where a property was built or an event occurred, setting refers to the character of the place in which the property played its historical role. It involves how, not just where, the property is situated and its relationship to surrounding features and open space. Setting often reflects the basic physical conditions under which a property was built and the functions it was intended to serve...."

Further, physical features that constitute the setting of a historic property can be either natural or manmade and can include topographic features (a gorge or the crest of a hill), vegetation, and relationships between buildings and other features or open space. Particularly important for Districts such as the AT, "these features should be examined not only within the exact boundaries of the property, but also between the property and its *surroundings*." The NPS will seek the guidance of the Maine State Historic Preservation Officer for further clarification and evaluation of cultural resources as part of the National Environmental Policy Act and the NRHP processes.

Viewpoints and Vistas

Viewpoints and Vistas along the AT are locations that are identified in the official guidebooks and maps as ideal scenic viewing locations and are specifically maintained to call attention to the scenery available within a given locale. They are important because they are often the feature in an area that most enhances the recreational hiking experience, are directly associated with the historical significance of the AT and are a contributing element of the AT's NRHP eligibility.

Preliminary analysis by NPS staff indicates that the proposed development would be visible from at least four prominent viewpoints: Poplar Ridge and the Poplar Ridge Lean-to, Saddleback Mountain, Saddleback Junior, and The Horn. An analysis, with photo simulations, should be undertaken as part of the EIS process that includes views of the landscape from the perspective of visitors to these mountaintop viewpoints and vista locations along the AT and during leaf-off season. Analysis should also be conducted from along the footpath itself, with the objective of capturing the wilderness experience and setting, from the perspective of the trail hiker. In

addition to identifying locations here, we request that when viewshed studies are conducted, Appalachian Trail Conservancy staff accompany the MDA staff or consultants conducting the analyses, for the purpose of providing access recommendations, location information and input on the study methods.

Natural Resources

The ecological integrity of the AT is in keeping with the intentions of the AT's original designers, which was to provide hikers with an opportunity to experience a remote, natural environment that offers refuge and the most extensive and scenic natural and wild lands available east of the Mississippi River. An analysis of impacts to the AT should consider its unique natural resources, including rare, threatened and endangered species, air resources, and the ambient sounds and night skies characteristic of the remote natural setting of the AT in this area. The following information is provided by the NPS Resource Specialists from the Natural Sounds/Night Skies Division and the Resource Management Plan. The information provided below is not exhaustive, and the NPS expects to continue to provide further input as the EIS moves forward.

Rare, Threatened and Endangered Species

Occurrences of rare, threatened, and endangered (RTE) species were documented in a series of natural heritage inventories conducted on AT Lands in each state between 1989 and 2001. State Natural Heritage Program rankings were used to identify RTE populations along the AT and surveys recorded occurrences of RTE species generally within a 500 foot corridor along the AT Several globally rare species were found along the AT in Maine; however, none are listed as federally threatened or endangered. Among the significant finds of the Maine Natural Heritage Inventory were the discovery of a plant never before recorded in Maine, Pinguicula vulgaris (common butterwort), and the rediscovery of a rare rush, Juncus vaseyi. Several sites along the AT in Maine provide breeding habitat for Catharus bicknelli (Bicknell's thrush), a species of special concern in the state and a breeding bird conservation priority in the United States and Canada.

One of the most significant natural heritage sites surveyed along the AT in the state is Saddleback Mountain, which rises into the alpine (above treeline) zone. Saddleback is primarily located on land administered by the NPS. On Saddleback Mountain, within the project vicinity on lands owned and administered by the NPS, seven rare plant species have been identified, though more may be present, since land recently acquired by the NPS from Saddleback Ski Area has not been completely surveyed yet. The NPS believes that rare plant species could be present and requests that additional surveys be conducted in this area.

Acoustic Environment

Natural and cultural sounds are integral components of the suite of resources and values that NPS managers are charged with preserving and restoring. The scenery, landscape and natural resources of national park units include the natural soundscape and acoustic environment. National park units are tasked with the responsibility to preserve and protect natural acoustic conditions and eliminate or mitigate inappropriate noise sources.

Some potential noise sources at the proposed Maine site include grading, clearing, construction, traffic, mechanical and electrical infrastructure, power plant or substation, explosive testing and wastewater treatment plant. For natural areas such as the Appalachian Trail near the proposed sites, several acoustic metrics would help describe acoustic conditions and assess potential impacts. These include time audibility of noise, maximum A-weighted sound levels (L_{max}), sound exposure level (SEL), comparison of equivalent sound level (L_{eq}), and number-of-events-above a specified sound level (NA). The inclusion of noise attenuation maps to demonstrate when noise levels from all sources would attenuate back to natural ambient conditions would improve acoustic resource analysis and help satisfy the requirements under the National Environmental Policy Act to characterize impacts to the environment in terms of intensity, context and duration (40 CFR 1508.27).

Noise not only impacts the acoustic environment, but also can impact trail visitors and wildlife. We request that the EIS address the impacts of noise to trail visitors by examining potential for sleep interference, speech interruption, and visitor expectations for quiet and solitude. It is also important to discuss the impacts of noise to wildlife and to relevant laws such as the Endangered Species Act and the Migratory Bird Treaty Act. Further, please include discussion of any connected actions or indirect effects that might occur as a result of the proposed action and the resultant impacts to the trail and its resources. The NPS Natural Sounds and Night Skies Division (NSNSD) would be happy to discuss the inclusion of these metrics in the EIS.

Night Skies

NPS managers are charged with preserving and restoring dark night skies and associated resources such as visitor experience, scenic views, and wildlife (NPS Management Policies 2006). The NPS preserves, to the greatest extent possible, the natural lightscapes which are natural resources and values that exist in the absence of human-caused light. Outdoor lighting of the proposed action, for security, operations, maintenance or other uses, could impact the trail and its resources and values. The large size of the proposed facility has potential to significantly impact the night sky of the AT in this area.

Environment effects from artificial lighting exist in two primary forms: Sky glow (the brightening of the night sky from human-caused light scattered in the atmosphere) and glare (the direct shining of light). Both of these forms can impact human perception of the night sky, natural landscape, ecological processes and wildlife interactions. A lighting plan should be developed with description of lighting needs, lighting types, lighting placement, and operation. The lighting plan should include specifics such as lumen output and color rendition in order that impacts could then be estimated for the project.

Mitigation of artificial lighting at night has proven to be effective in reducing impacts to the night sky resources. We recommend that mitigation be applied at all phases of the proposed project. For best results, NSNSD recommends the following approaches:

- Light only where it is needed
- Light only when it is needed
- Shield lights and direct them downward
- Use the minimum amount of light necessary
- Select lamps with warmer colors (less blue light)
- Select the most energy efficient lamps and fixture

Air Resources

Air quality is a central resource and a monitored and protected natural resource associated with the Appalachian National Scenic Trail. Trail managers monitor concentrations of pollutants in the air and assess the effects of those pollutants on park resources. There are a number of national ambient air monitoring stations located near the AT that monitor pollutants of primary concern to the NPS. In 2002, the NPS Air Resources Division staff developed baseline air quality values for all NPS units. Using concentrated isopleth maps, Trail managers, and NPS air quality specialists were able to indicate pollutant values along segments of the AT. The CIS deployment includes facilities, such as a power plant described as a 24,000 square foot structure for diesel generators. Poor air quality can adversely affect the health of visitors and workers on the Appalachian Trail and cause respiratory problems in humans and are a particular concern for those who are engaging in strenuous aerobic activity, such as hiking or trail maintenance. The NPS believe that the proposed development could negatively impacts air quality and that analysis in the EIS should be undertaken as part of the EIS development.

In closing, the NPS wishes to stay informed during EIS development, particularly in the event that future changes in project location and design would result in currently unanticipated impacts to NPS resources.

Thank you for the opportunity to comment. Please contact me at (304) 535-6279 if you have any questions, or would like to discuss further.

Sincerely,

Wendy K. Janssen
Superintendent

cc:

Ms. Kari S. Moore, NEPA Manager
PWD-ME Environmental

Mr. Ron Tipton, Executive Director/CEO
Appalachian Trail Conservancy

Mr. Earle G. Shettleworth, Jr., SHPO
Maine Historic Preservation Commission

Mr. Kirk F. Mohney, Deputy SHPO
Maine Historic Preservation Commission

APPALACHIAN TRAIL CONSERVANCY®

October 27, 2014

Missile Defense Agency/DPF
Bldg. 5222, Martin Road
Redstone Arsenal, AL 35898
ATTN: Mr. Ellis Gilliland, P.E., Ellis.Gilliland@mda.mil
Kari S. Moore, CIV NAVFAC MIDLANT, PWD Maine kari.moore@navy.mil

As a consulting party, the Appalachian Trail Conservancy appreciates this opportunity to provide additional input to the Missile Defense Agency's "Draft Description of Proposed Actions and Alternatives" (DOPAA). That document was shared with us by the National Park Service. We recognize that our status as a consulting party is based on our longstanding working relationship with the National Park Service and other agencies, and that the draft DOPAA remains confidential under both the federal and state FOIA statutes.

ATC fully supports all of NPS-Appalachian National Scenic Trail (APPA) Superintendent Wendy Janssen's comments. However, based on our conference call on October 16 and dialogue with NPS-APPA, we wish to provide some additional input not covered by the NPS for your consideration. ATC's remarks below should be considered *in addition to* the NPS input to you.

The ATC also wants to acknowledge its public comments submitted in September by ATC's Maine Conservation Resources Manager Claire Polfus to MDA's consultant Black & Veatch Special Projects Corp during the initial public input phase of the MDA's CIS EIS.

Our goal in submitting these additional comments is to aid the MDA in its obligations to fully analyze the impacts of the deployment of a Continental U.S. Interceptor Site (CIS or CONUS) development at the Redington/SERE site as required by the National Environmental Policy Act.

Transportation Limitations: Unless there is some national security prohibition for not sharing the information publicly, ATC requests that you compare the transportation variables among the four locational alternatives presented in the draft DOPAA for both the Ground Based Interceptors (GBI) and the Silo Interface Vaults/Silos (SIV/Silos) *separately*. We have been regularly confused and concerned that the analysis of the transportation of the GBI *is not adequately separated* from your analysis of the transportation of the SIV/Silos. They are two entirely different structures with significantly different transportation requirements.

In terms of both the logistics and routing between ocean-side or river-side shipping ports and final destinations at the proposed CIS locations, the SIV/Silos are considerably larger. The GBIs are 55 feet long by 4.2 feet in diameter and weigh between 22.5 and 27 tons. This is an entirely reasonable load for a military vehicle or a regulated commercial carrier to manage along public roads and highways from the four listed C-17 accessible airports. (We would point out, however, that the Redington/SERE site is more than one hundred miles farther from a C-17-accessible airport than the three alternative locations.)

The Silo Interface Vaults/Silos (SIV/Silos), however, are an entirely different matter, measuring 214 feet long by 14 feet wide by 17 feet high and weighing 175 tons (350,000 pounds). The dimensions of the SIV/Silo exceed the maximum federal highway standards in bridge-underpass height. The U.S. Rural and Urban standard (from the American Association of State Highway and Transportation Officials or AASHTO) is 14 to 16 feet, versus the SIV/Silo's height of 17 feet.

ATC HEADQUARTERS
799 Washington Street, P.O. Box 807, Harpers Ferry, WV 25425-0807 | Phone: 304.535.6331 | Fax: 304.535.2667 | www.appalachiantrail.org

Regarding weight, the U.S. Rural and Urban AASHTO standard is 80,000 to 100,000 pounds or 40 to 50 tons, whereas the SIV/Silo tips the scales at 175 tons. In other words, the SIV/Silo is more than *three times heavier* than customarily allowed by law, and presumably by the U.S. DOT and Interstate Highway System engineers.

ATC has prepared a table (attached) that proposes comparable criteria between the four proposed CIS sites. However, we are not qualified to provide much more detailing of these missile development criteria and don't know the specifics necessary to highlight comparable data, such as the location of ocean-side or river-side ports, or the actual highway routes that you plan to use or consider as alternatives. Therefore, we recommend that the MDA or its contractors continue to parse these data into comparable criteria that will be much more revealing to your analysis in comparing attributes of the four different locations than is possible in the current draft DOPAA.

Viewshed, Soundscape, and Slope Analyses: See the two attached maps, "Proposed Missile Defense Facility Map with Viewshed" and "Proposed Missile Defense Facility Map with Road Slope."

The scenic and aural values of this section of the A.T. are known worldwide. ATC fully supports and will assist the National Park Service's plan to visually and aurally evaluate this proposal. The Appalachian National Scenic Trail shares 8.4 miles of common boundary with the Navy SERE site, 4.9 miles on the north of the A.T. corridor, and 3.5 miles on the south side, so it is vulnerable to extensive visual and aural impacts. Considering the extensive security night lighting proposed, the visual effects on the Appalachian National Scenic Trail—designated by Congress as a scenic and cultural resource of national significance—will be profound, and, we believe, impossible to mitigate. Additionally, the towers associated with Ground Support & Fire Control Systems (GS&FCS) on the unnamed peak to the north will be front-and-center in the view from the Horn, Saddleback Junior, and Poplar Ridge viewpoints.

At its closest point, the A.T. footpath will be less than one-quarter mile from the proposed CIS expansion area. As is clear on the viewshed map, much of the CIS facility will be visible from the A.T.'s four principal viewpoints, and also from along the A.T., particularly during leaf-off seasons. The A.T. here curves in a westerly sweeping arc where it crosses the Caribou Valley. This could mean that the CIS facility would be visible to hikers for a distance of about 30 miles (more than two days hiking time). This damaging effect will be particularly pronounced at night.

Because that area of the A.T. is one of its most remote, the natural soundscape is high quality, with wind, birds, other natural sounds, and silence predominating. Noise from five years of construction, and from electric generators thereafter, will pollute the western Maine soundscape for years.

Regarding slope, ATC wants to point out that the SERE/Redington site is the steepest by far among the four competing proposals. It ranges from 1,540 feet in elevation to more than 2,560—more than a thousand feet in relief. Roads and facilities will require high-cut banks, extensive cribbing, drainage, and culverts to control erosion. The average grade of the two-mile-long road to the GS&FCS towers is *17 percent* (emphasis intended).

Finally, we wish to acknowledge our earlier remarks by telephone that this area is extremely wet—the floor of the valley and adjacent slopes are a significant Maine aquifer that will require constant pumping and complications from excessive hydrostatic pressures in the silo walls. Metamorphosed sandstones and shales, intermixed with the not-easily excavated granodiorite, a granitic rock, will complicate and make construction expensive. This will not be like Alaska's Fort Greely where MDA's contractor used a 15-foot auger to drill 75-foot deep holes in glacial till, a much more feasible soil profile, and one with no slope or hydrological complications.

As mentioned during the conference call, ATC is very worried that the MDA and its contractors are seriously underestimating the suitability of this site as a candidate for a Continental U.S. Interceptor Site.

Historical Protection of National Park Conditions in Western Maine: ATC, the Maine Appalachian Trail Club, the Maine Appalachian Trail Land Trust, the Appalachian Mountain Club and a host of other organizations including the Trust for Public Land and The Conservation Fund have worked for generations to protect the Appalachian Trail in one of the most beautiful and iconic regions of Maine. Public and private efforts totaling thousands of hours and millions of dollars over generations have been focused on building the A.T. and conserving its associated park and forest lands and resources throughout this region. The affected areas include almost 40 miles of the Appalachian Trail across the Saddleback Massif, Sugarloaf, Crocker Mountains, and the Bigelow Preserve, including Little Bigelow.

As you know, the A.T. qualifies for the National Register of Historic Places, however, this section profoundly demonstrates that significance: It includes the very final section on Spaulding Mountain where the A.T. was completed 77 years ago, in August 1937; it includes the State's Bigelow Preserve, now a 27,000-acre preserve that was mandated following a citizen's petition in 1975–76 demanding protection of this federal National Natural Landmark; it is immediately adjacent to lands preserved by the Appalachian Trail Conservancy working cooperatively with the State of Maine, including Mount Abraham, and lands recently protected by a coalition led by the Trust for Public Land across the Crocker Mountains; it includes current conservation projects aimed at protecting the 10,258 "Redington Forest Tract" immediately north of the existing SERE site and thousands more acres south of the A.T. in the Perham Stream drainage.

In light of the significance of federal, state, and private initiatives to protect these special properties over the past 80 or so years at this location, and mindful that—since 1968—U.S. public policy has mandated preservation of the Appalachian Trail as a National Scenic Trail, "so located as to provide for the maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass" (National Trails System Act, P.L. 90-543, Sec. 3), we submit that this additional input, coupled with the National Park Service's response, cannot but lead the MDA to conclude that the Redington/SERE site should be removed from further consideration as a site for locating the Continental Interceptor Site in the MDA's EIS.

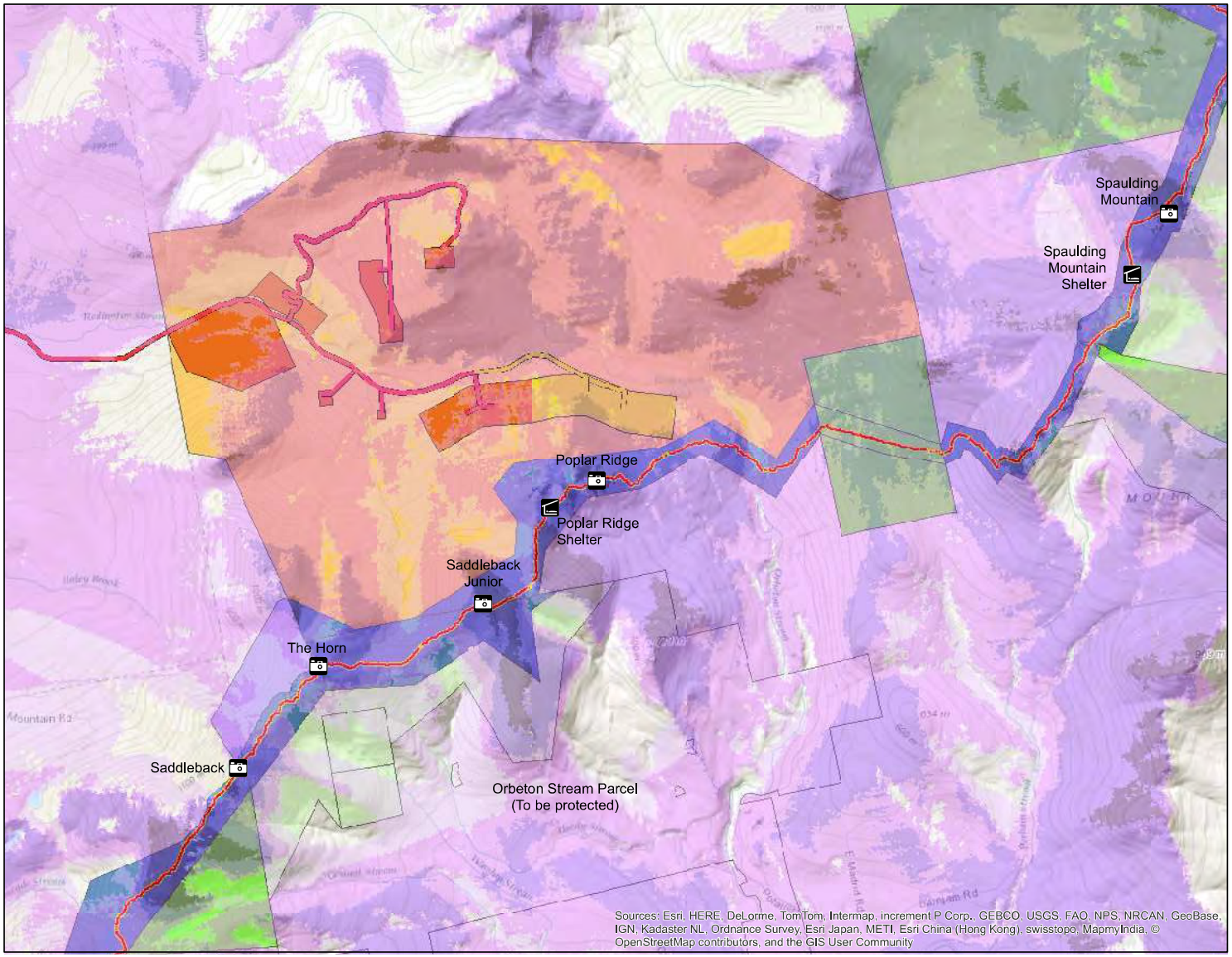
Thank you for this opportunity to comment.

Hawk Metheny
New England Regional Director

Claire Polfus
Maine Conservation Resources Manager

cc: Wendy Janssen, Superintendent, Appalachian National Scenic Trail
Ron Tipton, Executive Director, Appalachian Trail Conservancy
Earle G. Shettleworth, Jr., State Historic Preservation Office
Kirk F. Mohney, Deputy, Maine Historic Preservation Commission

Enclosures:
ATC Proposed Missile Defense Facility Map with Viewshed
ATC Proposed Missile Defense Facility Map with Road Slope
ATC Comparison of CIS Locational Alternatives—a Draft Comparison



PROPOSED MISSILE DEFENSE FACILITY

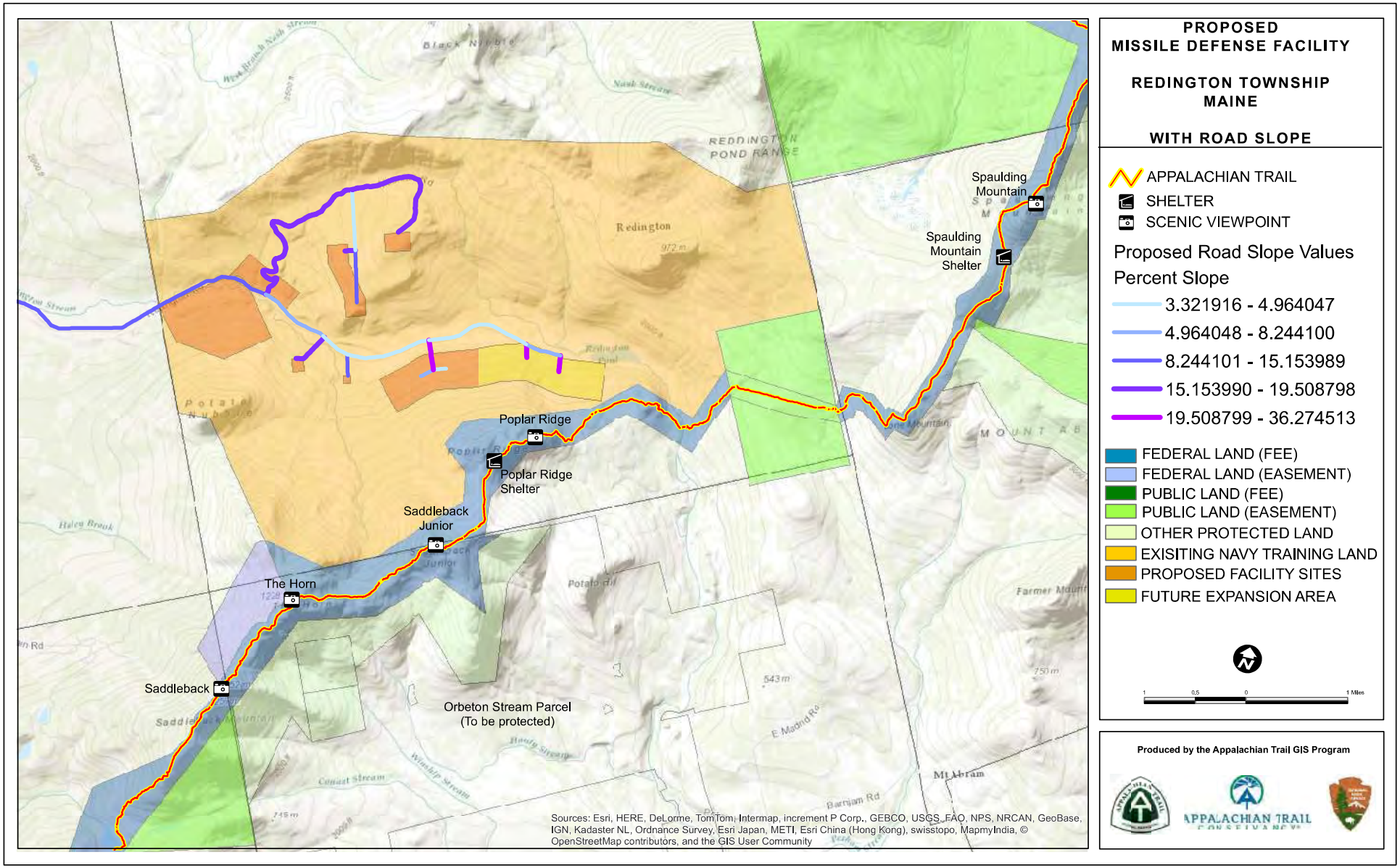
REDINGTON TOWNSHIP MAINE

- EXISITING NAVY TRAINING LAND
- PROPOSED FACILITY SITES
- PROPOSED NEW ROADS
- FUTURE EXPANSION AREA
- FUTURE ROAD EXPANSION
- POTENTIALLY VISIBLE AREAS FROM THE A.T. (dark areas are more visible)
- APPALACHIAN TRAIL
- SHELTER
- SCENIC VIEWPOINT
- FEDERAL LAND (FEE)
- FEDERAL LAND (EASEMENT)
- PUBLIC LAND (FEE)
- PUBLIC LAND (EASEMENT)
- OTHER PROTECTED LAND

1 0.5 0 1 Miles

Produced by the Appalachian Trail GIS Program

APPALACHIAN TRAIL CONSERVANCY


PROPOSED
MISSILE DEFENSE FACILITY
REDINGTON TOWNSHIP
MAINE
WITH ROAD SLOPE
APPALACHIAN TRAIL
SHELTER
SCENIC VIEWPOINT
Proposed Road Slope Values
Percent Slope
3.321916 - 4.964047
4.964048 - 8.244100
8.244101 - 15.153989
15.153990 - 19.508798
19.508799 - 36.274513
FEDERAL LAND (FEE)
FEDERAL LAND (EASEMENT)
PUBLIC LAND (FEE)
PUBLIC LAND (EASEMENT)
OTHER PROTECTED LAND
EXISITING NAVY TRAINING LAND
PROPOSED FACILITY SITES
FUTURE EXPANSION AREA
Spaulding Mountain
Spaulding Mountain Shelter
Poplar Ridge
Poplar Ridge Shelter
Saddleback Junior
The Horn
Saddleback
Orbeton Stream Parcel
(To be protected)
Redington
REDINGTON POND RANGE
Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
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APPALACHIAN TRAIL CONSERVANCY

CIS Deployment Alternatives (a partial comparison)

Criteria	*2.8.1 Fort Custer Training Center, Augusta MI*	*2.8.2 Camp Ravenna Military Ctr. OH*	*2.8.3 Fort Drum NY*	*2.8.4 SERE Redington ME*
Acres of undisturbed land needed for GBI Fields	Approximately 600 acres. p. 2-26, line 400	Approximately 600 acres. p. 2-29, line 448	Approximately 750 acres for option 1 and 450 acres for option 2. p 2-32, lines 488-489	"The training area cannot accommodate the Missile Defense Complex components in a contiguous parcel of land, therefore, the components and facilities would be arrayed at multiple sites with the training area." p 2-34, line 516-519. 400 acres would be graded. p. 2-34, line 524.
Acres of undisturbed land needed for future GBI Field Expansion	Approximately 250 acres. p. 2-26, line 402	Approximately 250 acres. p. 2-29, line 450	300 acres. p. 2-32, line 491	300 acres. P. 2-34, line 524
Acres of Construction needed for non-mission facilities	Approximately 100 acres. p. 2-27, line 406	Approximately 100 acres. p. 2-31, line 462	Approximately 100 acres. p. 2-32, line 498	Approximately 100 acres. p. 2-34, line 527. However, unlike the other sites, "None of the necessary facilities for mission support and basic Army Life Support Facilities are available at this site. Approximately 350 acres would be required for non-mission facilities..." p. 2-36, lines 533-534
Total acres graded	950 acres	950 acres	850-1150 acres	1150 acres; however, given slopes and wetness, ATC feels acreage affected will be much larger
Army support requirements needed	"The surrounding cities and local community would provide the Army support requirements such as housing, childcare and Moral, Welfare and Recreation (MWR) activities." p. 2-27, lines 409-410	"The surrounding cities and local community would provide the Army support requirements such as housing, childcare and MWR activities." p. 2-31, lines 462-464	There is no mention of MWR activities except that Fort Drum's mission is "to provide base operations support for forces, training and deployment and to provide installation services for military and civilians." p 2-31-2-32. lines 476-477.	There is no mention of MWR activities.
Nearest C-17 compatible airfield	W.K. Kellogg ANGB (**±3-5 miles**) "It is anticipated Skyline Road running between FCTC and Kellogg ANGB would beclosed for a period (several hours) to allow the safe transport of GBIs and associated equipment to and from the airfield to FCTC." p. 2-27, lines 420-422	"The nearest C-17 capable airfields are the Akron-Canton Regional Airport, located **approximately 15 miles** from Ravenna; and Youngstown Air Reserve Station located approximately 23 miles from Ravenna. Transportation of GBIs and associated equipment from either of these airfields to Ravenna wuld be by public roads." p. 2-31, lines 467-470	"SIV/Silos would be transported over interstate highway to the nearest two-lane highway to Fort Drum. The primary route would be NY Route 37 West. The road is a two-lane highway with wide shoulders along the entire route." p. 2-32, lines 499-500. Note: No reference to C-17 access here but the language above infers its relative proximity.	"The nearest C-17 compatible airfield is in Bangor, ME. The GBIs would be transported approximately 126 miles from Bangor, ME to the site by public roads." p 2-36, lines 546-547
Nearest apparent Shipping Ports for SIV/Silo	Lake Erie ±120 miles; Lake Michigan ±75 miles	Lake Erie ±50 miles at Cleveland	Lake Erie ±30 miles	Saint Lawrence Seaway (mentioned in our phone conference, not in the DOPAA) ±420 miles via I-95 and crossing US Canadian border at Houlton, Maine, to Augusta

A&MF	Administrative & Maintenance Facility
BMDS	Ballistic Missile Defense System
CIS or	Continental US Interceptor Site
CONUS	Continental US Interceptor Site
ECS	Entry Control Station
EKV	Exo-atmospheric Kill Vehicle
GBI	Ground Based Interceptor
GMD	Ground based Mid-course Defense
GS&FCS	Ground Support & Fire Control Systems
IDT	Inflight Data Terminal or Inflight Communications and Data Terminal
ISF	Interceptor Storage Facility
LE/MC	Launch Essential/Mission Critical
LSC	Launch Site Components
MAB	Missile Assembly Building
MDA	Missile Defense Agency
MDC	Missile Defense Complex
MEB	Mechanical Electrical Building
MSF	Maintenance Support Facility
R&CF	Readiness & Communications Facility
SCF	Security Control Facility
SCM	Silo Closure Mechanism
SIV	Silo Interface Vault

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

October 24, 2014

Missile Defense Agency/DPF
Bldg. 5222, Martin Road
Redstone Arsenal, AL 35898
ATTN: Mr. Ellis Gilliland, P.E.

RE: Comments to Draft Description of the Proposed Actions and Alternatives, Continental United States Interceptor Site, SERE East, Redington Township, ME

Dear Mr. Gilliland:

Thank you for the opportunity to comment on the Draft Description of the Proposed Actions and Alternatives for the potential Continental United States Interceptor Site, in Redington Township, Maine. The Maine Department of Environmental Protection (Department) is pleased to provide these comments to the Missile Defense Agency (MDA) in advance of its preparation of the Environmental Impact Statement.

The MDA has requested comments from the Department that identify resources that may be potentially impacted from the proposed project. The Department's comments are of a general nature at this time since the facility layout is only conceptual, and site-specific information about the presence or absence of natural resources is not yet known. It is the responsibility of those seeking permits and approvals from the Department to demonstrate that the applicable statutory standards will be met. We have included comments about the anticipated Department required licenses and approvals, a list of protected natural resources that could be impacted, and comments to specific elements of the proposed project.

Department licenses and approvals:

A proposed project of this size and nature with these anticipated impacts to protected natural resources is expected to require multiple reviews, approvals, and/or licenses from all three bureaus of the Department. The anticipated list of required approvals and licenses includes:

Bureau of Land and Water Quality:

A Site Location of Development Act license (Title 38, M.R.S.A. §§ 481-490). This law requires review of developments that may have a substantial effect upon the environment. There are twenty-five standards that need to be met, including stormwater management,

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AUGUSTA, MAINE 04333-0017
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(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
(207) 764-0477 FAX: (207) 760-3143

web site: www.maine.gov/dep

groundwater protection, impacts to wildlife and fisheries, noise, and scenic impacts. The applicant will need to provide application materials that demonstrate that each of the standards will be met.

A Natural Resources Protection Act license (Title 38, M.R.S.A. §§ 480-A to 480-HH). Protected natural resources are defined as fragile mountain areas, freshwater wetlands, significant wildlife habitats (including vernal pools), great ponds, and rivers, streams or brooks. Proposed activities located in, on, over or adjacent to protected natural resources require a license under the Natural Resources Protection Act. The application materials will need to provide information on the presence and location of any protected natural resource within the project area, proposed impacts to those resources, and measures taken to avoid and minimize impacts to the greatest extent practicable. Be advised that the U.S. Army Corps of Engineers has separate regulations and permitting processes relating to impacts to wetlands, vernal pools, and other natural resources. The Department and the U.S. Army Corps of Engineers work concurrently on project reviews.

Redington Township is an unorganized territory of the state of Maine. As such, the Maine Land Use Planning Commission, a program of the Department of Agriculture, Conservation and Forestry, serves as the planning and zoning authority for this township. As part of the Site Location of Development permitting process, the Land Use Planning Commission issues a certification that the proposed land uses are allowed, and that proposed development activities comply with applicable standards. The Land Use Planning Commission also administers the Mandatory Shoreland Zoning Act, which generally includes areas within 250 feet of ponds, lakes, and other waterbodies.

Bureau of Air Quality:

Air Emission license (Department Rules, Chapter 115). An air emission license is required for stationary sources that consist of fuel-burning equipment whose total maximum design heat input is equal to or greater than 10 million British thermal units per hour (MMBtu/hr). The proposed facility may include four, 3-MW generators for power generation. Each of these generators would equal a heat input capacity of approximately 30 MMBtu/hr, equating to a total maximum design heat input for the four generators of at least 120 MMBtu/hr. An application for an air emission license could include facility identifying information, emissions related information, description of the facility, a best available control technology analysis, and an ambient air quality impact analysis demonstrating compliance with ambient air quality standards.

Bureau of Remediation and Waste Management:

Spill Prevention Control and Countermeasure Plan (Title 38, M.R.S.A. §§ 570-K). SPCC plans will be required for the 90,000 gallon above-ground diesel fuel storage tanks, loading facility, and day tanks. Underground piping from tanks to day tanks and generator will be required to be registered with the Department in advance of installation and must meet the

design, leak detection, operation and maintenance requirements of Chapter 691 of the Department's rules. Underground piping will need to be installed by a Maine certified tank installer. If the diesel fuel storage facility will be located on a Significant Sand and Gravel mapped by the Maine Geological Survey, and associated with the South Branch of the Dead River, or within 1000 feet of the Town of Rangeley's municipal drinking water supply system well field on the Redington Road, a variance will be required from the Department in advance of installation under Chapter 692 of the Department's rules. The diesel fuel storage facility will also require a construction permit from the Maine State Fire Marshal and be designed in accordance with NFPA standards.

The draft report does not include sufficient detail to determine what type of hazardous waste will be generated or stored. The Department regulates small quantity generators of hazardous waste under its Chapter 850 Rules, and the proposed facility will need to comply with all applicable state and federal RCRA regulations.

Potential protected natural resources in the project area:

The Department has not conducted a site visit to the proposed project area, but based on a desktop review of natural resources that may be present, and our knowledge of the general area, we anticipate that the following protected natural resources may be in the project area:

- Redington Pond
- Freshwater wetlands, including wetlands of special significance
- Vernal pools and significant vernal pools
- Streams and brooks
- Fragile mountain areas (above 2700 feet in elevation)
- Significant wildlife habitat, including deer wintering areas

Comments on specific elements of proposed project:

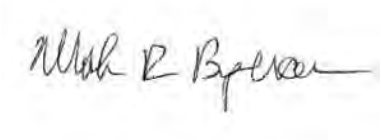
1. One of the statutory standards of the Site Location of Development Law that needs to be met is that the proposed facility will not cause adverse effects to scenic character. The applicant will need to provide information on locations and heights of structures, antennae, and radar-type facilities. Given the close proximity of the Appalachian Trail and other protected natural resources, the Department will need to make a determination on whether the proposed project fits harmoniously into the existing natural environment. A visual impact assessment with photosimulations may be a useful tool.
2. Information will be required on all types of proposed exterior lighting, including any hazard lighting required by the Federal Aviation Administration. Significant exterior lighting could have an adverse effect on wildlife habitats, and could cause scenic impacts to the Appalachian Trail.
3. The Department recommends that all proposed temporary and permanent construction activities are included in the application materials so that a determination can be made on all the potential project impacts. Information about the temporary construction man

camps, potential offsite improvements for transporting large missile components, and the proposed phasing of the project facilities will be necessary.

4. Public safety and welfare due to potential fires from within the facility, as well as potential risks to the proposed facility from offsite forest fires, need to be addressed. Detailed cooperative agreement details with the Maine Forest Service and local emergency responders should be included in application materials.
5. The Department is concerned about the impacts of grading large, flat areas in a mountainous region of Maine. Detailed information about soil types, sand and gravel aquifers, blasting practices, and efforts made to reduce earthworks will be necessary.
6. The Department will need additional information on site-specific information on water supply and wastewater disposal measures as those details are developed, including whether off-site municipal utilities will be used, or whether new facilities will be developed on site. Offsite impacts to streams and wetlands caused by utility crossings will need to be included in the overall project impacts.
7. An alternatives analysis of sites considered but not carried forward was mentioned but not included in this report. As part of the Natural Resources Protection Act application materials, an alternatives analysis will be required for avoiding and minimizing impacts to protected natural resources.

The Department appreciates the opportunity to provide these comments on this proposed project. Please contact me with further questions you may have.

Sincerely,



Mark Bergeron, P.E.
Director, Division of Land Resource Regulation
Bureau of Land and Water Quality
Maine Department of Environmental Protection

C: Heather Parent, Acting Deputy Commissioner

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY
LAND FOR MAINE'S FUTURE PROGRAM
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

PAUL R. LEPAGE
GOVERNOR

WALTER E. WHITCOMB
COMMISSIONER

August 12, 2014

Board of Selectmen/Town Manager/County Commisioner
Town of Redington Township

RE: **Redington Forest** Land for Maine's Future Proposal – project in your community

Dear Chief Elected Official:

The Land for Maine's Future Program (LMF) works to coordinate, and provide funds for, acquisition of lands for conservation, water access, outdoor recreation, wildlife and fish habitat, farmland and working waterfront protection. These projects are funded by bonds authorized by the legislature and approved by voters.

At the July 15, 2014 LMF meeting, the Board selected a proposal from the The Trust for Public Land for funding titled Redington Forest Project. The project lands are in the Town of Redington Township.

This letter is to notify you that this project is selected as a finalist.

We will now work with the applicant on the LMF due diligence process. Before project funding is finally approved, the Board will publish a public notice and take public comment at one of its regularly scheduled meetings.

All LMF Board meetings are open to the public and provide opportunity for public comment prior to the Board's vote to select projects as finalists.

Written comments can be addressed to: Chair, Land for Maine's Future Board, 28 SHS, Augusta, ME 04333-0028

If you have questions about the Redington Forest Proposal please contact the applicant:
The Trust for Public Land, 30 Danforth Street, Suite 106, Portland, 04101
Telephone: 772-7424 x2 Email: gregg.caporossi@tpl.org

Or, you can reach me at 287-7576 or email ed.meadows@maine.gov

You may also want to visit the Land for Maine's Future web site http://www.maine.gov/dacf/lmf/ where you can learn more about the Program and past projects.

Sincerely,

Ed Meadows

Ed Meadows, Director, Land for Maine's Future

cc: Senator Thomas Saviello
Representative Jarrod Crockett
Gregg Caporossi, The Trust for Public Land
Kathy Eickenberg, DACF-Bureau of Parks and Lands

PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
284 STATE STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041

CHANDLER E. WOODCOCK
COMMISSIONER

October 22, 2014

Mr. Ellis Gilliland, P.E.
Missile Defense Agency/DPF
Bldg. 5222, Martin Road
Redstone Arsenal, AL 35898

RE: Information Request – Ballistic Missile Defense System, Interceptor Site, SERE East, Redington TWP, Maine

Dear Mr. Gilliland:

Per your request received September 25, 2014, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information for known locations of Endangered, Threatened, and Special Concern species; designated Essential and Significant Wildlife Habitats; and fisheries habitat concerns within the vicinity of the potential Missile Interceptor Site in Redington Township, Maine.

Our Department has not mapped any Essential Habitats that would be directly affected by your project; however, our information indicates the presence or possible presence of several species of Endangered, Threatened, or Special Concern species as well as Significant Wildlife Habitats and important fishery habitats. Findings for each category of protected resource are specified below.

Endangered, Threatened, and Special Concern Species

State-listed Threatened and Endangered Species are protected under the Maine Endangered Species Act (MESA), and as such are afforded special protection by the State. Specifically, §12808 of the MESA prohibits actions that Take (kill) or Harass (injure or disrupt normal behavioral patterns) a state-Endangered or Threatened species. Surveys and a subsequent evaluation of impacts for the following species should be completed prior to project design to ensure that this project will not impact State-listed species. *For information about acceptable survey design and protocols, please contact Bob Cordes, MDIFW Region D Wildlife Biologist (207-778-3324).*

Bicknell's thrush (Species of Special Concern): Bicknell's thrush can be found in sub-alpine forests usually dominated by balsam fir and red spruce at elevations >2,700 feet. They are among the landbirds species of highest conservation concern in North America. Bicknell's thrush is at risk from a variety of threats to its breeding habitats, including recreational development, telecommunications construction, wind power development, and climate warming.

Northern bog lemming (State-listed Threatened): Northern bog lemmings usually occur in moist, wet meadows or boggy areas, often in conjunction with artic or alpine tundra and spruce-fir forests at elevations >2,700 feet. This species is among Maine's rarest and most elusive

mammals and is vulnerable to extirpation. It has been documented on the northeast side of Poplar Ridge.

Rock Vole (State-listed Special Concern): The Rock Vole (a.k.a. yellow-nosed vole) is known to inhabit coniferous and mixed forests at higher elevations. They favor damp moss-covered rocks and talus slopes. Rock voles occur in small populations in scattered locations within the state.

Spring Salamander (State-listed Special Concern): Spring salamanders occur in cold, clean, swift-flowing mountain streams. They are also found in less steep cool seeps and springs in forested areas. Spring salamanders are threatened by timber harvesting and development practices that degrade stream habitat.

Roaring Brook Mayfly (State-listed Endangered): Roaring Brook mayfly is found in high-gradient, clear mountain streams characterized by cascades, large boulders, and coarse granite bottom. This species may be present in the streams located within the project site. Roaring Brook mayfly is found in only a few locations in Maine. Its extreme rarity makes it vulnerable to extirpation.

Bats: Seven out of eight species of bats in Maine are currently listed as Species of Special Concern by MDIFW: eastern small-footed bat (*Myotis leibii*), little brown bat (*Myotis lucifugus*), northern long-eared bat (*Myotis septentrionalis*), red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), silver-haired bat (*Lasionycteris noctivagans*), and tri-colored bat (*Perimyotis subflavus*). The three species of *Myotis* are also currently the subject of the rulemaking process for protection under Maine's list of Threatened and Endangered species. While a comprehensive statewide inventory for bats has not been completed, it is likely that all or most of these species occur within the project area during migration and/or the breeding season. Maine's bat species forage and roost in forested areas. Given the extensive tree clearing that would be involved to complete this project, bat species will likely be impacted.

At this time we have not developed guidelines to avoid or minimize impacts to habitat for these bat species, particularly from forestry clearing operations associated with the construction of the project; therefore, we will defer to guidance and recommendations provided from the U.S. Fish and Wildlife Service (USFWS), as the northern long-eared bat is being proposed for listing as an Endangered Species under the Federal Endangered Species Act. *Please include MDIFW Endangered Species Coordinator Charlie Todd (207-941-4468) in all correspondence that is related to bats.*

Significant Wildlife Habitat

Significant Wildlife Habitats (SWH) are protected under Maine's Natural Resources Protection Act and include Inland Waterfowl and Wading Bird Habitat, Tidal Waterfowl and Wading Bird Habitat, Deer Winter Areas, Seabird Nesting Islands, Shorebird Areas, and Significant Vernal Pools. The following SWHs have been identified within the proposed project area:

Inland Wading Bird and Waterfowl Habitat (IWWH): Two IWWHs have been mapped within the project area. They include Redington Pond and a portion of Redington Stream. These habitats provide important breeding, feeding, migration, staging, and wintering habitat for waterfowl and wading bird species. IWWHs include both the wetland complex and a 250-foot upland zone. We recommend that these resources be avoided, including no clearing within the 250-foot undisturbed buffer from the wetland edge.

Significant Vernal Pools: Vernal pools have not been mapped within the project area; however, a comprehensive statewide inventory for Significant Vernal Pools has not been completed at this time. Vernal pool surveys will need to be conducted prior to project design to verify the presence or absence of Significant Vernal Pools. Once surveys are completed, our Department will need to verify vernal pool data sheets prior to final determination of significance.

Fisheries Habitat

Streams and ponds within the project area include significant fishery resources:

American Eel (State-listed Species of Special Concern): American eel have been documented in Redington Pond. As American eel are managed by the Maine Department of Marine Resources, we recommend that you contact Gail Wippelhauser (207-624-6349) for any concerns she may have regarding this species

Brook trout ponds and streams: Redington Pond as well as several streams within the project area support wild brook trout. Maine is the last remaining stronghold for this important sport-fish species. We generally recommend that a 100-foot undisturbed vegetated buffer be maintained along water resources. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining buffers along coldwater fisheries is critical to the protection of water temperatures, water quality, and inputs of coarse woody debris necessary to support conditions required by brook trout. Stream crossings should be avoided, but if a stream crossing is necessary it should be designed to provide adequate fish passage. Generally, MDIFW recommends that all new and replacement stream crossings be sized to span 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e. natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. We encourage you to contact Region D Fisheries Biologist Robert VanRiper (207-778-3322) for crossing design recommendations that best maintain fish passage. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts to stream habitat. In addition, we recommend that any necessary instream work or work within 100 feet of streams occur between July 15 and October 1.

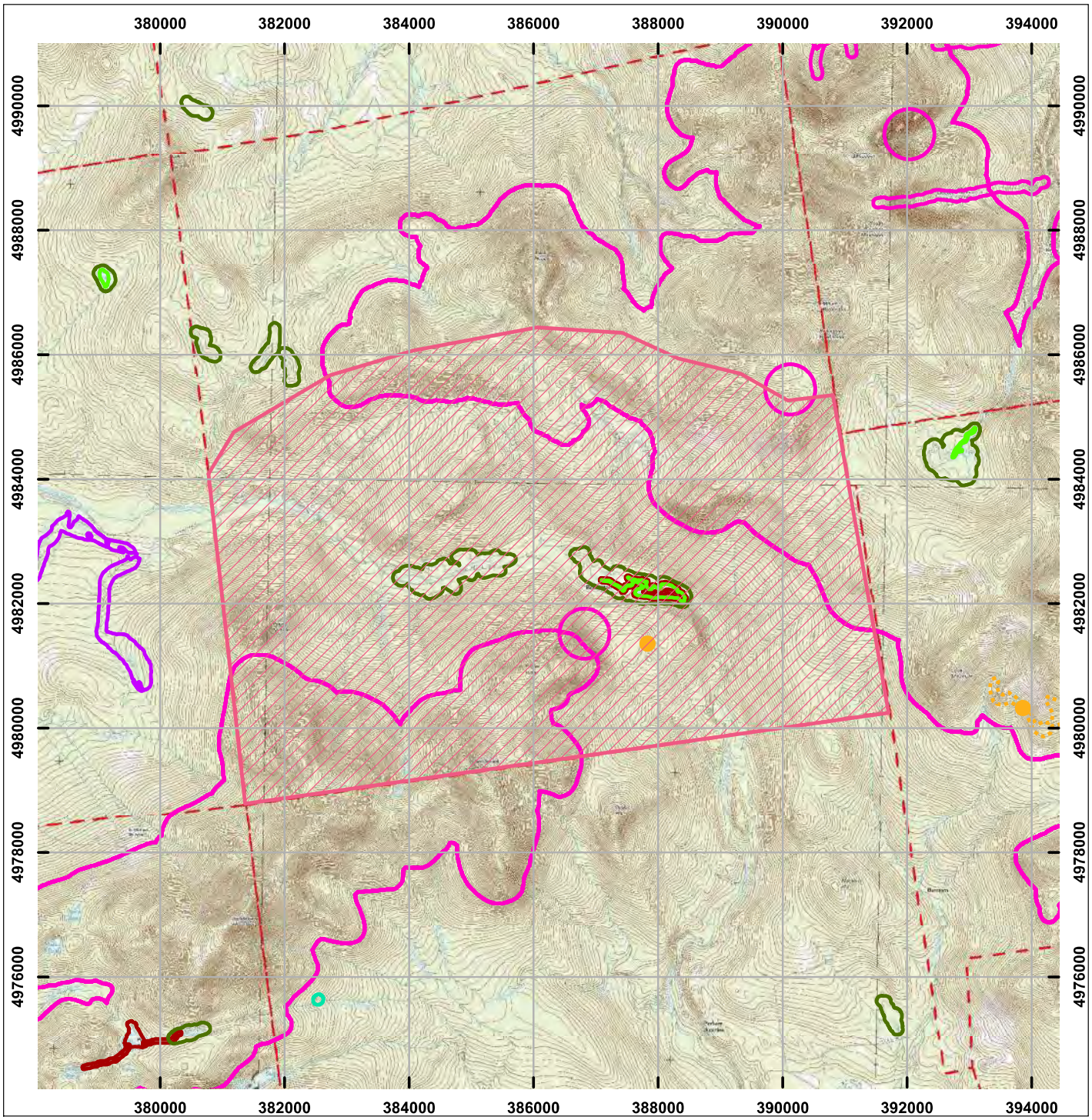
This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance we recommend additional consultation with the municipality, and other state resource agencies including the Maine Natural Areas

Program and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance.

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

John Perry
Environmental Review Coordinator



Environmental Review of Fish and Wildlife Observations and Priority Habitats

Project Name: Redington Township, Missile Defence System (Version 1)

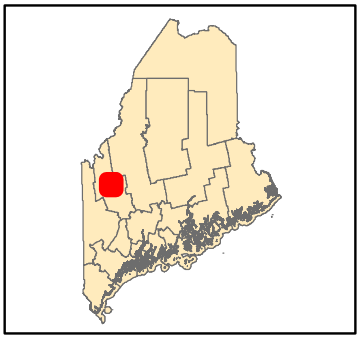
Maine Department of
Inland Fisheries and Wildlife

0 0.5 1 2 3 4 Miles

Projection: UTM, NAD83, Zone 19N

Date: 9/6/2014

- ProjectPoints
- ProjectLines
- ProjectPolys
- ProjectSearchAreas
- Deer Winter Area
- LURC p-fw
- Cooperative DWAs
- Seabird Nesting Islands
- Inland Waterfowl/Wading Bird
- Shoreland Zoning_Iwwh
- Tidal Waterfowl/Wading Bird
- Significant Vernal Pools
- Environmental Review Polygons
- Roseate Tern
- Piping Plover/Least Tern
- Aquatic ETSc (2.5 mi review)
- Rare Mussels (5 mi review)
- A and B List Ponds
- Arctic Charr Habitat
- E. Brook Trout Joint Venture Subwatershed Classification
- Redfin Pickerel/Swamp Darter Habitats (buffer100ft)
- Special Concern-occupied habitats(100ft buffer)
- Wild Lake Trout Habitats



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Paul R. LePage
GOVERNOR

David Bernhardt
COMMISSIONER

27 October 2014

Missile Defense Agency/DPF
Attn: Mr. Ellis Gilliland, P.E.
Building 5222, Martin Road
Redstone Arsenal, AL 35898

Dear Mr. Gilliland:

I write in response to your letter to the Maine Department of Transportation (MaineDOT). We appreciate the opportunity to comment on the EIS Draft Description of Proposed Actions and Alternatives for a prospective CONUS Interceptor Site in the Eastern U.S. The state of Maine has proudly hosted national defense-related strategic assets since the early days of our nation, and continues in that tradition today. We appreciate the goals of the CONUS program to provide protection from missile attack, while at the same time minimizing impacts to the natural and built environment of host locations. We will be interested to follow the study as you evaluate potential sites in Michigan, Ohio, New York and Maine.

From the perspective of the state transportation agency, the main considerations for us to evaluate for your purposes are feasibility of movement, and impacts on the state infrastructure and on communities. In this regard, table 2.40-1 SIV/Silo Transportation Requirements (page 2-20) provides maximum weights and dimensions that define the feasibility of moving such loads over Maine's transportation network to Redington Township. In recent years, our senior traffic and bridge engineers have worked to accommodate extraordinary vehicle weights and dimensions, and achieved successful movements over Maine's highway and bridge network. These loads have included GVWs heavier than the 350,000-lb. SIV/Silo load and overall load lengths greater than 214 feet. While these movements required careful planning and care, Maine has completed them with moderate difficulty over certain roadways and bridges. Our cursory conclusion is that I-95 and the three state-jurisdiction numbered routes could likely handle the GVW and load length with appropriate planning and engineering oversight. However, a Maximum Axel Weight of 28,500 lbs. could pose significant risk of damage to Maine's roads and bridges, depending on the axel configuration. MaineDOT has worked with many haulers, and there are many trailer and carriage configurations available to reduce the axle loads to a more desirable 20,000-lb limit. Whether the GVW and load length can be accomplished on the designated route would also require additional study. We at MaineDOT are ready to consult with MDA engineers in greater detail on these questions at any time.

At 17 feet, the overall load height of the proposed load presents a more formidable hurdle in that the standard bridge height on Maine roadways, including the Interstate, is only 14'6". With numerous bridges over the roadway on the designated route, this issue would appear decisive in ruling out movements of these vehicles over any significant extent of Maine's roadways. Again, we are ready to discuss this in detail with MDA logistics experts to determine whether there are alternative configurations or routes that would enable the transport vehicles to pass safely under Maine highway bridges without damaging or displacing existing infrastructure. We are also available to consult with you regarding possible alternatives to highway transport, or routing through other jurisdictions than the proposed route.

The final consideration we would raise is that the timing of vehicle movements of this scale and frequency must always be scheduled with ongoing highway construction projects, local events and local interests in mind. We are certain you are well aware of these considerations as a regular aspect of transporting these enormous vehicles, wherever it may be. If Maine were to ultimately become the site for such an installation, we would expect to work closely with MDA planners and engineers to ensure the safe, non-disruptive and successful transport of these payloads to their destination.

Again, thank you for inviting our agency to comment. Our staff is ready to discuss the transportation aspects of this potential project at any time. We look forward to learning more about the study and your findings in the coming months and years.

Sincerely,

David Bernhardt,
Commissioner

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
LAND USE PLANNING COMMISSION
22 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0022

PAUL R. LEPAGE
GOVERNOR

October 27, 2014

Via E-mail Only

Ellis Gilliland, P.E.
Missile Defense Agency/DPF
Bldg. 5222, Martin Road
Redstone Arsenal, AL 35898

RE: Continental United States (CONUS) Interceptor Site Environmental Impact Statement and Draft Description of Proposed Actions and Alternatives

Dear Mr. Gilliland:

By letter dated September 25, 2014, the Department of Defense, Missile Defense Agency provided the Maine Land Use Planning Commission (the LUPC or Commission) a Draft Description of Proposed Actions and Alternatives (DOPAA) and requested comments on this draft. Our understanding is that the draft DOPAA has been prepared as part of the larger Environmental Impact Statement (EIS) for the Continental United States Interceptor Site. The DOPAA consideres the No-Action Alternative and sites at the Fort Custer Training Center, Augusta, Michigan; Camp Ravenna Joint Military Training Center, Portage and Trumbull counties, Ohio; Fort Drum, Fort Drum, New York; and the Center for Security Forces Detachment Kittery Survival, Evasion, Resistance, and Escape (SERE East) Facility, Redington Township, Maine.

The Commission administers land use planning and regulations within the Unorganized and Deorganized Areas of Maine, including Redington Township (Section 2.8.4 of the DOPAA) and surrounding townships. In accordance with the Commission's authority and 40 U.S.C. Sec. 3312, the LUPC is providing this preliminary response, regarding only the SERE East facility.

Based on the analysis of the notional project, the LUPC offers the following feedback:

1. In accordance with Title 12, Section 685-B,1-A,B-1 (*attached*), the Maine Department of Environmental Protection (MDEP) regulates development of state or regional significance (*i.e.*, Site Law projects) within the Unorganized and Deorganized Territories of Maine. In these cases, the Commission must certify that the proposed development is an allowed use within the subdistrict or subdistricts for which it is proposed and the proposed development meets any land use standard established by the Commission that is not considered in the MDEP review. Ultimately, the MDEP makes all determinations whether projects are reviewed under Site Law.
2. Timber harvesting, in all but development subdistricts, is regulated by the Maine Forest Service.
3. While the DOPAA maps are very general regarding activity and geographic extent, portions of at least Dallas Plantation are indicated as part of the project area; Dallas Plantation is a prospectively zoned area. Within the Commission's Land Use Districts and Standards, grey highlighted standards (*e.g.*, Section 10.25,B and Sections 10.26,C – E of the Commission's

18 ELKINS LANE, HARLOW BUILDING
PHONE: 207-287-2631 www.maine.gov/acf FAX: 207-287-7439

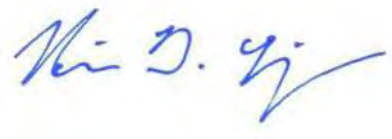
standards) will apply to project components located within prospectively zoned areas. *See* Land Use Districts and Standards, Section 10.08,C,2 for a complete list of prospectively zoned areas.

4. While the federal government, as the property owner and applicant, must obtain a development permit from state agencies with respect to environmental regulations, federal agencies are exempt from zoning requirements[1]. However, we have conducted a high level review of the notional project for compatibility with existing subdistricts and uses. This review is intended only to identify issues for the Missile Defense Agency to consider, not to imply state zoning authority with respect to this project.
5. Zoning Subdistricts Present in the Project Area:
   a) General Management Subdistrict (M-GN) (Section 10.22,A) – The study area is primarily designated as the M-GN Subdistrict. The notional project as a whole is neither an allowed use, nor compatible with the subdistrict purposes which are primarily forestry and agriculture. However, this zone is applied to nearly 80% of the Commission's service area, and it does not indicate that there are specific protected resources present.
   b) Shoreland Protection and Wetland Protection Subdistricts (P-SL and P-WL) (Sections 10.23,L and N) – While we presume few (if any) activities will technically occur within the P-SL or P-WL subdistricts, the notional project as a whole is neither an allowed use, nor compatible with the subdistrict purposes. Additionally, we note that impacts to wetlands and streams, regardless of Commission zoning, likely would be considered through application of any state environmental regulations. This would likely happen through the MDEP permit process.
   c) Soil and Geology Protection Subdistrict (P-SG) (Section 10.23,K) – No notional activities are indicated for those areas zoned as P-SG.
   d) Residential Development Subdistrict (D-RS) (Section 10.21,J) – The D-RS subdistrict is located within an area indicated as a possible future expansion area for the missile defense complex; that use is not consistent with residential uses, so thought should be given to how to buffer any activities from existing residential uses.
   e) Commercial and Industrial Development Subdistrict (D-CI) (Section 10.21,A) – While two small areas, near the Northeast of the study area, are designated as D-CI, the EIS maps are inconclusive as to whether these sites are located within the study area. Regardless, neither D-CI subdistrict is located near a notional facility component. A D-CI zone does indicate that the area is likely suitable for commercial or industrial activities.
6. The project includes a range of uses, many of which are likely to require adequate buffering to be compatible with neighboring uses. However, most of the development areas (areas illustrated by the DOPAA map in red) may be distant enough from property boundaries, which may aid in addressing compatibility with neighboring uses. The one exception, Life Support Facilities, currently extends to, or near the property line. Consideration should be given to the development type, intensity, and final location so that conflicts may be avoided or addressed.
7. As the draft DOPAA indicates, the property is contiguous with the Appalachian Trail (AT) corridor. The AT is an important recreation resource to the state and region. We understand that the National Park Service or AT administrators have been contacted for comment.

[1] 40 USC sec. 3312

Thank you for the opportunity to review the draft DOPAA and provide feedback early in the EIS process. Should you have any questions about these comments, please contact Tim Beaucage at (207) 287-4894 or tbeaucage@maine.gov.

Sincerely,



Nicholas D. Livesay
Director, Land Use Planning Commission

att: Title 12 Section 685-B
Guidance Document on Site Law Certification, Land Use Standards

cc: Jim Beyer, MDEP (via e-mail only)

Maine Revised Statutes

Title 12: CONSERVATION

Chapter 206-A: USE REGULATION

§685-B. DEVELOPMENT REVIEW AND APPROVAL

1. Review and approval required. Except as provided in this section or by commission rule:

A. A structure or part of a structure may not be erected, changed, converted or wholly or partly altered or enlarged in its use or structural form without a permit issued by the commission. Normal maintenance or repair may be made to a structure or part of a structure without a permit issued by the commission in locations other than areas of special flood hazard as defined in the commission's rules; [2009, c. 111, §2 (AMD).]

B. A person may not commence development of or construction on any lot, parcel or dwelling unit within any subdivision or sell or offer for sale any interest in any lot, parcel or dwelling unit within any subdivision without a permit issued by the commission; or [1999, c. 333, §12 (RPR).]

C. A person may not commence any construction or operation of any development without a permit issued by the commission. [1999, c. 333, §12 (RPR).]

[2009, c. 111, §2 (AMD) .]

1-A. Exceptions. Except as provided in this section or by commission rule:

A. A permit is not required for the repair and maintenance of an existing road culvert or for the replacement of an existing road culvert, as long as the replacement culvert is:

(1) No more than one standard culvert size wider in diameter than the culvert being replaced;

(2) No more than 25% longer than the culvert being replaced; and

(3) No longer than 75 feet.

Ancillary culverting activities, including excavation and filling, are included in this exemption. A person repairing, replacing or maintaining an existing culvert under this paragraph shall ensure that erosion control measures are taken to prevent sedimentation of the water and that the crossing does not block fish passage in the water course; [2001, c. 402, §4 (AMD).]

B. Except for projects that are located in a planned subdistrict that was approved or accepted by the commission for processing prior to September 1, 2012, a permit is not required for those aspects of a project approved by the Department of Environmental Protection under Title 38 if the commission determines that the project is an allowed use within the subdistrict or subdistricts for which it is proposed. Notice of the intent to develop and a map indicating the location of the proposed development must be filed with the commission prior to or concurrently with submission of a development application to the Department of Environmental Protection; [2011, c. 682, §14 (AMD).]

B-1. Except for projects that are located in a planned subdistrict that was approved or accepted by the commission for processing prior to September 1, 2012, a permit from the commission is not required for a development of state or regional significance that may substantially affect the environment as defined in Title 38, section 482, subsection 2. A project meeting that definition is reviewed under Title 38, section 489-A-1. A person submitting a development proposal to the Department of Environmental Protection under Title 38, section 489-A-1 shall file a notice of the intent to develop and a map indicating the location of the proposed development with the commission prior to or concurrently with submission of a development application to the Department of Environmental Protection. The Department of Environmental Protection must receive certification from the commission that the proposed development is an allowed use within the subdistrict or subdistricts for which it is proposed

and the proposed development meets any land use standard established by the commission that is not considered in the department's review under Title 38, section 489-A-1, subsection 1 before issuing a permit. Nothing in this subsection may be construed as prohibiting the commission from enforcing the land use standards certified to the Department of Environmental Protection under this paragraph; [2011, c. 2, §9 (COR).]

(Paragraph B-1 as enacted by PL 2011, c. 653, §2 and affected by §33 is REALLOCATED TO TITLE 12, SECTION 685-B, SUBSECTION 1-A, PARAGRAPH B-2)

B-2. (REALLOCATED FROM T. 12, §685-B, sub-§1-A, ¶B-1) A permit is not required for a project for mining of metallic minerals that is reviewed under the Maine Metallic Mineral Mining Act. A person submitting a permit application to the Department of Environmental Protection under Title 38, chapter 3, subchapter 1, article 9 for a metallic mineral mining project located wholly or in part within the unorganized and deorganized areas of the State shall file a notice of the intent to develop and a map indicating the location of the proposed development with the commission prior to or concurrently with submission of a development application to the Department of Environmental Protection. The commission must certify to the department that the proposed development is an allowed use within the subdistrict or subdistricts for which it is proposed and that the proposed development meets any land use standards established by the commission and applicable to the project that are not considered in the department's review. This paragraph does not prohibit the commission from enforcing the land use standards certified to the Department of Environmental Protection under this paragraph; [2011, c. 2, §10 (AFF); 2011, c. 2, §8 (RAL).]

C. A permit is not required for a campsite in a management district; [2009, c. 270, Pt. D, §2 (AMD).]

D. A permit is not required for an offshore wind energy demonstration project approved by the Department of Environmental Protection pursuant to Title 38, section 480-HH. Notice of the intent to develop and a map indicating the location of the proposed development must be filed with the commission prior to or concurrently with submission of an application to the Department of Environmental Protection pursuant to Title 38, section 480-HH; and [2009, c. 270, Pt. D, §3 (NEW).]

E. A permit or other approval by the commission is not required for a hydropower project that uses tidal or wave action as a source of electrical or mechanical power or is located partly within an organized municipality and partly within an unorganized territory. [2009, c. 615, Pt. F, §1 (AMD).]

[2011, c. 2, §10 (AFF); 2011, c. 2, §§8, 9 (COR) .]

1-B. Delegation to staff. The commission may establish standards by which authority may be delegated to its staff, to approve with reasonable conditions or deny applications submitted. Any person aggrieved by a decision of the staff has the right to a review of that decision by the commission. A request for such a review must be made within 30 days of the staff decision.

[1999, c. 333, §13 (NEW) .]

1-C. Delegation to county. The commission may establish standards by which authority may be delegated to a county, upon request of the county commissioners, to approve, approve with reasonable conditions or deny applications to conduct specified activities requiring a permit and to enforce compliance with the permit. Any person aggrieved by a decision of a county has the right to appeal that decision to the commission. Such an appeal must be made within 30 days after the county decision.

[2011, c. 682, §16 (NEW) .]

2. Application for approval. The application forms for approval, as provided by the commission, must be completed and signed by the applicant and must be accompanied by the following:

A. A plan of the proposed structure, subdivision or development showing the intended use of the real estate, the proposed change, the details of the project and such other information as may be required by the commission to determine conformance with applicable land use standards; [1989, c. 681, §1 (AMD).]

B. The fee prescribed by the commission rules, that fee to be a minimum of $50 but no greater than 1/4 of 1% of the total development costs. The fees apply to all amendments except for minor changes to building permits. In addition to the fee paid in accordance with this paragraph, the director of the Maine Land Use Planning Commission may assess a processing fee on applications for extraordinary projects in accordance with section 685-F; [2007, c. 114, §1 (AMD); 2011, c. 682, §38 (REV).]

C. [1977, c. 564, §51 (RP).]

D. Evidence of sufficient right, title or interest in all of the property that is proposed for development or use. For purposes of this subsection, the written permission of the record owner or owners of flowed land is deemed sufficient right, title or interest to confer standing for submission of a permit application, provided that the letter of permission specifically identifies the activities being performed and the area that may be used for that purpose. The commission may not refuse to accept, under this paragraph, a permit application for any prohibited activity if the owner or lessee of land adjoining a great pond has made a diligent effort to locate the record owner or owners of the flowed land in question and has been unable to do so; and [1989, c. 681, §1 (AMD).]

E. For a new or expanded development requiring an annual supply of wood or wood-derived materials in excess of 150,000 tons green weight, a wood supply plan for informational purposes to the Maine Forest Service at the time of application. The wood supply plan must include, but is not limited to, the following information:

(1) The expected operational life of the development;

(2) The projected annual wood consumption of wood mill residue, wood fiber and recycled materials from forest products during the entire operational life of the development;

(3) The expected market area for wood supply necessary to supply the development; and

(4) Other relevant wood supply information. [1989, c. 681, §1 (NEW).]

[2007, c. 114, §1 (AMD); 2011, c. 682, §38 (REV) .]

2-A. Priority for processing. Applications to replace destroyed seasonal or permanent structures shall be given top priority for processing when hardship can be demonstrated by the applicant provided that:

A. The dimensions of the new structure are not greater than the preexisting structure; and [1989, c. 22, §1 (NEW).]

B. The new structure will not adversely affect surrounding uses and resources. [1989, c. 22, §1 (NEW).]

[1989, c. 22, §1 (NEW) .]

2-B. Determination deadline. The commission shall render its determination on an application for subdivision approval within 60 days after the commission determines that the application is complete and the proposal is a permitted use within the affected district or subdistrict.

[1989, c. 584, §2 (NEW); 1989, c. 810, §2 (AMD) .]

2-C. Wind energy development; community-based offshore wind energy projects; determination deadline. For purposes of this subsection, "expedited permitting area," "grid-scale wind energy development" and "wind energy development" have the same meanings as in Title 35-A, section 3451. The following provisions govern wind energy development.

A. The commission shall consider any wind energy development in the expedited permitting area under Title 35-A, chapter 34-A with a generating capacity of 100 kilowatts or greater or a community-based offshore wind energy project a use requiring a permit, but not a special exception, within the affected districts or subdistricts. [2011, c. 682, §17 (RPR).]

B. All grid-scale wind energy development proposed for the unorganized or deorganized areas of the State is reviewed and permits are issued by the Department of Environmental Protection under Title 35-A, chapter 34-A and Title 38, section 489-A-1. [2011, c. 682, §17 (RPR).]

C. For an offshore wind energy project that is proposed within one nautical mile of an island within the unorganized or deorganized areas, the commission shall review the proposed project to determine whether the project qualifies as a community-based offshore wind energy project and therefore is within the jurisdiction of the commission. [2011, c. 682, §17 (NEW).]

D. Except for a grid-scale wind energy project, the commission may require an applicant to provide a timely notice of filing prior to filing an application for, and may require the applicant to attend a public meeting during the review of, a wind energy development or a community-based offshore wind energy project. For projects or development located within the expedited permitting areas, the commission shall render its determination on an application for such a development or project within 185 days after the commission determines that the application is complete, except that the commission shall render such a decision within 270 days if it holds a hearing on the application. The chair of the Public Utilities Commission or the chair's designee shall serve as a nonvoting member of the commission and may participate fully but is not required to attend hearings when the commission considers an application for a community-based offshore wind energy project. The chair's participation on the commission pursuant to this subsection does not affect the ability of the Public Utilities Commission to submit information into the record of the commission's proceedings. [2011, c. 682, §17 (NEW).]

E. At the request of an applicant, the commission may stop the processing time for a period of time agreeable to the commission and the applicant. The expedited review period specified in paragraph D does not apply to the associated facilities, as defined in Title 35-A, section 3451, subsection 1, of the wind energy development or community-based offshore wind energy project if the commission determines that an expedited review time is unreasonable due to the size, location, potential impacts, multiple agency jurisdiction or complexity of that portion of the development or project. [2011, c. 682, §17 (NEW).]

[2011, c. 682, §17 (RPR) .]

3. Hearings and procedures.

[1999, c. 333, §14 (RP) .]

3-A. Hearings and procedures. Hearings and procedures in connection with the review and approval of a permit application are subject to this subsection. To the extent practicable, hearings held under this subsection must be held at a location in close proximity to the project or projects under review.

A. The commission may determine on its own motion to hold a hearing on the application. [1999, c. 333, §15 (NEW).]

B. If the commission determines to act upon a permit application without a hearing, the commission, within 90 days after receiving the complete application, shall make findings of fact and issue an order either granting approval, subject to reasonable terms and conditions that the commission determines appropriate in order to fulfill the requirements and intent of this chapter, the comprehensive land use plan and the commission's standards, or denying approval of the application as proposed. [1999, c. 333, §15 (NEW).]

C. Any person aggrieved by a decision of the commission or its staff concerning any permit application upon which no hearing was held may, within 30 days of that decision, petition the commission for a hearing. The commission is not required to hold a hearing, but shall respond within 45 days of receipt of the petition by notifying the petitioner in writing of the date, time and place set for the requested hearing or of the denial of the request. [1999, c. 333, §15 (NEW).]

D. Within 60 days after the commission adjourns any hearing held under this subsection, it shall make findings of fact and issue an order either granting approval, subject to reasonable terms and conditions that the commission determines appropriate in order to fulfill the requirements and intent of this chapter, the comprehensive land use plan and the commission's standards, or denying approval of the application as proposed. [1999, c. 333, §15 (NEW).]

[2011, c. 682, §18 (AMD) .]

4. Criteria for approval. In approving applications submitted to it pursuant to this section, the commission may impose such reasonable terms and conditions as the commission may consider appropriate. In making a decision under this subsection regarding an application for a community-based offshore wind energy project, the commission may not consider whether the project meets the specific criteria designated in section 1862, subsection 2, paragraph A, subparagraph (6), divisions (a) to (d). This limitation is not intended to restrict the commission's review of related potential impacts of the project as determined by the commission.

The commission may not approve an application, unless:

A. Adequate technical and financial provision has been made for complying with the requirements of the State's air and water pollution control and other environmental laws, and those standards and regulations adopted with respect thereto, including without limitation the minimum lot size laws, sections 4807 to 4807-G, the site location of development laws, Title 38, sections 481 to 489-E, and the natural resource protection laws, Title 38, sections 480-A to 480-Z, and adequate provision has been made for solid waste and sewage disposal, for controlling of offensive odors and for the securing and maintenance of sufficient healthful water supplies; [2011, c. 653, §3 (AMD); 2011, c. 653, §33 (AFF).]

B. Adequate provision has been made for loading, parking and circulation of land, air and water traffic in, on and from the site, and for assurance that the proposal will not cause congestion or unsafe conditions with respect to existing or proposed transportation arteries or methods; [2011, c. 682, §19 (AMD).]

C. Adequate provision has been made for fitting the proposal harmoniously into the existing natural environment in order to ensure there will be no undue adverse effect on existing uses, scenic character and natural and historic resources in the area likely to be affected by the proposal. In making a determination under this paragraph regarding development to facilitate withdrawal of groundwater, the commission shall consider the effects of the proposed withdrawal on waters of the State, as defined by Title 38, section 361-A, subsection 7; water-related natural resources; and existing uses, including, but not limited to, public or private wells, within the anticipated zone of contribution to the withdrawal. In making findings under this paragraph, the commission shall consider both the direct effects of the proposed withdrawal and its effects in combination with existing water withdrawals.

In making a determination under this paragraph regarding a community-based offshore wind energy project, the commission shall consider the project's effects on scenic character and existing uses related to scenic character in accordance with Title 35-A, section 3452.

In making a determination under this paragraph regarding a wind energy development, as defined in Title 35-A, section 3451, subsection 11, that is not a grid-scale wind energy development, that has a generating capacity of 100 kilowatts or greater and that is proposed for location within the expedited permitting area, the commission shall consider the development's or project's effects on scenic character and existing uses relating to scenic character in the manner provided for in Title 35-A, section 3452; [2011, c. 682, §19 (AMD).]

C-1. With respect to a wind energy development that has a generating capacity of 100 kilowatts or greater, the person proposing the development has received certification from the Department of Environmental Protection in the manner provided under Title 35-A, section 3456; [2011, c. 682, §19 (NEW).]

D. The proposal will not cause unreasonable soil erosion or reduction in the capacity of the land to absorb and hold water and suitable soils are available for a sewage disposal system if sewage is to be disposed on-site; [1999, c. 333, §17 (AMD).]

E. The proposal is otherwise in conformance with this chapter and the regulations, standards and plans adopted pursuant thereto; and [2007, c. 661, Pt. C, §3 (AMD).]

F. In the case of an application for a structure upon any lot in a subdivision, that the subdivision has received the approval of the commission. [1973, c. 569, §11 (NEW).]

The burden is upon the applicant to demonstrate by substantial evidence that the criteria for approval are satisfied, and that the public's health, safety and general welfare will be adequately protected. The commission shall permit the applicant and other parties to provide evidence on the economic benefits of the proposal as well as the impact of the proposal on energy resources.

[2011, c. 653, §3 (AMD); 2011, c. 653, §33 (AFF); 2011, c. 682, §19 (AMD) .]

4-A. Subdivision of land subject to liquidation harvesting. The commission may not approve an application for a subdivision if the commission determines that timber on the parcel proposed for subdivision has been harvested in violation of rules adopted pursuant to section 8869, subsection 14. If a violation of rules adopted by the Maine Forest Service to substantially eliminate liquidation harvesting has occurred, the commission must determine prior to granting approval for the subdivision that 5 years have elapsed from the date the landowner under whose ownership the harvest occurred acquired the parcel. The commission may request technical assistance from the Maine Forest Service to determine if a rule violation has occurred.

For the purposes of this subsection, "liquidation harvesting" has the same meaning as in section 8868, subsection 6 and "parcel" means a contiguous area within one municipality, township or plantation owned by one person or a group of persons in common or joint ownership. This subsection takes effect on the effective date of rules adopted pursuant to section 8869, subsection 14.

[2003, c. 622, §1 (NEW) .]

4-B. Special provisions; community-based offshore wind energy project. In the case of a community-based offshore wind energy project, the developer must demonstrate, in addition to requirements under subsection 4, that the proposed generating facilities, as defined in Title 35-A, section 3451, subsection 5:

A. Will meet the requirements of the Board of Environmental Protection's noise control rules adopted pursuant to Title 38, chapter 3, subchapter 1, article 6; [2007, c. 661, Pt. C, §4 (NEW).]

B. Will be designed and sited to avoid undue adverse shadow flicker effects; and [2011, c. 682, §20 (AMD).]

C. Will be constructed with setbacks adequate to protect public safety, as provided in Title 35-A, section 3455. In making findings pursuant to this paragraph, the commission shall consider the recommendation of a professional, licensed civil engineer as well as any applicable setback recommended by a manufacturer of the generating facilities. [2011, c. 682, §20 (AMD).]

D. [2011, c. 682, §20 (RP).]

[2011, c. 682, §20 (AMD) .]

5. Limitation, expiration, transfer and revocation of approval. Commission authorization pursuant to this section shall permit only the arrangement and construction set forth in the approval as issued. Change in use, arrangement or construction shall be considered a violation of this chapter and punishable as provided in this chapter.

A violation of any condition attached to a commission approval or permit, or any change in use, arrangement or construction from that approved, shall be deemed a violation of this chapter and, in addition to any other penalties or remedies prescribed herein or otherwise provided by law, shall constitute grounds for the revocation or suspension of this approval. The commission may, acting in accordance with Title 5, section 10003, amend, modify or refuse to renew any commission approval or permit where the commission determines that the criteria for approval set forth in subsection 4, paragraphs A to F, have not been, are not being, or will not be satisfied.

[1977, c. 694, §232 (AMD) .]

6. Recording of approved proposals. A copy of each application, marked approved or disapproved, shall be retained in the commission files and shall be available to the public during normal business hours.

In the event the commission approves an application for subdivision approval, a copy of an approved plat or plan and a copy of the conditions required by the commission to be set forth in any instrument conveying an interest within the subdivision attested to by an authorized commission signature shall be filed with the appropriate registry of deeds in the county in which the real estate lies.

A registrar of deeds shall not record a copy of conditions or any plat or plan purporting to subdivide real estate located within the unorganized and deorganized lands of the State, unless the commission's approval is evidenced thereon.

The grantee of any conveyance of unrecorded subdivided real estate or subdivided real estate recorded in violation of this section may recover the purchase price, at interest, together with damages and costs in addition to any other remedy provided by law.

[1987, c. 885, §5 (AMD) .]

6-A. Recording of land division plan required. A copy of each land division plan must be recorded in the registry of deeds of the county in which the land is located.

A. When 3 to 10 lots each containing at least 40 acres are created within a 5-year period and are located more than 1,320 feet from the normal high water line of any great pond or river and more than 250 feet from the upland edge of a coastal or freshwater wetland as defined in Title 38, section 436-A, a plan showing the division of the original parcel must be filed by the person creating the 3rd lot with the commission within 60 days of the creation of that lot. The plan must state that the lots may be used only for forest management, agricultural management or conservation of natural resources. [2001, c. 431, §4 (AMD).]

B. A register of deeds may not record any plan depicting these lots within the unorganized and deorganized lands of the State unless the commission's certification that the division qualifies under section 682-B is evidenced on the plan. The commission must determine whether the plan qualifies under section 682-B within 15 business days of receipt of the plan. [2001, c. 431, §4 (AMD).]

C. A copy of the certified plan must be filed within 30 days of certification with the State Tax Assessor and the appropriate registry of deeds in the county in which the land is located. [1991, c. 687, §2 (NEW).]

D. Failure to file the plan required by this subsection is a violation of this chapter subject to the penalties provided in section 685-C, subsection 8. [1991, c. 687, §2 (NEW).]

[2001, c. 431, §4 (AMD) .]

6-B. Notification of land division required.

[2001, c. 431, §5 (RP) .]

7. Nonconforming uses and nonconforming structures. To achieve the purposes set forth in this chapter after the adoption of permanent district standards and permanent districts, the commission may regulate and prohibit expansion and undue perpetuation of nonconforming uses. Specifically the commission may regulate and prohibit:

A. Changes in nonconforming uses to another nonconforming use; [1971, c. 457, §5 (NEW).]

B. Extension or enlargement of nonconforming uses or nonconforming structures; [1989, c. 22, §2 (AMD).]

C. Resumption of nonconforming uses, by prohibiting such resumption if such use is discontinued for 2 years or abandoned; and [1973, c. 569, §11 (AMD).]

D. Movement or enlargement of a nonconforming structure or of a structure containing a nonconforming use. [1971, c. 457, §5 (NEW).]

The commission may also provide for the termination of commercial or industrial nonconforming uses by specifying in land use standards the period or periods in which nonconforming uses shall be terminated and by adjusting such compulsory terminations so as to allow reasonable time for the conversion of such nonconforming uses and reasonable schedules for the amortization of investment.

Any use for which a special exception has been granted by the commission, as provided for in section 685-A, subsection 10, shall not be deemed a nonconforming use, but shall be deemed a conforming use in such district.

For applications to reconstruct a damaged or destroyed nonconforming structure, the commission shall require the new structure to comply with provisions of this chapter to the maximum extent possible.

[1989, c. 22, §2 (AMD) .]

7-A. Reconstruction of commercial sporting camps. The commission may approve a permit for the reconstruction of a damaged or destroyed nonconforming commercial sporting camp that was a permissible use under commission standards at the time of the damage or destruction. The commission may, consistent with public health, safety and welfare, and to the minimum extent necessary, waive standards that made the original structure nonconforming. The reconstructed structure must replicate the original structure and use to the maximum extent possible and it must be on the same location and within the same footprint as the original structure. Reconstruction must occur within 2 years of the damage or destruction.

[1995, c. 386, §3 (NEW) .]

8. Certificates of compliance. It shall be unlawful to use or occupy or permit the use or occupancy of any land, structure, or part thereof, created, erected, changed, converted, or wholly or partly altered or enlarged in its use or structural form, requiring subsequent review and approval pursuant to this subchapter, until a certificate of compliance has been issued therefor by the commission stating that the requirements and conditions of approval have been met.

A certificate of compliance may contain such terms and conditions as will protect the health, safety and general welfare of the occupants, users and the public.

The commission may establish standards within which authority shall be delegated to its staff, to issue or deny certificates of compliance. Any person aggrieved by a decision of the staff shall have the right to a review of such decision by the commission members within 30 days of such decision.

[1973, c. 569, §11 (AMD) .]

9. Periodic review of district boundaries and land use standards.

[1973, c. 569, §12 (RP) .]

10. Moratorium. The commission may adopt a moratorium on the processing or issuance of development permits on a township-by-township basis, on portions of a township or on portions of the territory under its jurisdiction. Any moratorium adopted by the commission must meet the following requirements.

A. The moratorium must be necessary:

(1) To prevent the shortage or overburdening of public facilities which would otherwise occur during the effective period of the moratorium or which is reasonably foreseeable as a result of any proposed or anticipated development; or

(2) Because the application of existing comprehensive plans, land use or zoning regulations or other applicable laws, if any, is inadequate to prevent serious public harm from residential, commercial or industrial development in the affected geographic area. [1989, c. 47, §2 (NEW).]

B. The moratorium must be of a definite term not to exceed 180 days except that the moratorium may be extended for additional 180-day periods provided that the commission:

(1) Finds that the problem creating the need for a moratorium still exists; and

(2) Finds that reasonable progress is being made to alleviate the problem creating the need for a moratorium. [1989, c. 47, §2 (NEW).]

C. Any organized town or plantation which has petitioned the commission to remove that town or plantation from the jurisdiction of the Maine Land Use Planning Commission in compliance with section 685-A, subsection 4, may, through a town meeting, vote to adopt a moratorium to provide a period of time for the town or plantation to adopt a local comprehensive plan and zoning ordinance and to establish a municipal reviewing authority. The moratorium must be in compliance with paragraphs A and B. The municipal officers, acting in place of the commission, may extend the moratorium pursuant to paragraph B after notice and hearing. [1989, c. 47, §2 (NEW); 2011, c. 682, §38 (REV).]

[1989, c. 47, §2 (NEW); 2011, c. 682, §38 (REV) .]

SECTION HISTORY
1971, c. 457, §5 (NEW). 1971, c. 544, §§28F-28I (AMD). 1971, c. 618, §§12,17 (AMD). 1971, c. 619, §§6,7 (AMD). 1973, c. 569, §§11,12 (AMD). 1977, c. 213, §§1-3 (AMD). 1977, c. 360, §17 (AMD). 1977, c. 564, §51 (AMD). 1977, c. 694, §§228-232 (AMD). 1979, c. 127, §§68,69 (AMD). 1981, c. 194, §1 (AMD). 1985, c. 819, §§A18,19 (AMD). 1987, c. 653, §4 (AMD). 1987, c. 769, §A49 (AMD). 1987, c. 771, §§1,2 (AMD). 1987, c. 885, §§3-5 (AMD). 1989, c. 22, §§1,2 (AMD). 1989, c. 47, §2 (AMD). 1989, c. 430, §§1,2 (AMD). 1989, c. 584, §2 (AMD). 1989, c. 585, §E1 (AMD). 1989, c. 596, §G1 (AMD). 1989, c. 681, §1 (AMD). 1989, c. 810, §2 (AMD). 1989, c. 878, §A31 (AMD). 1991, c. 9, §E9 (AMD). 1991, c. 46, §1 (AMD). 1991, c. 528, §E8 (AMD). 1991, c. 528, §RRR (AFF). 1991, c. 591, §E8 (AMD). 1991, c. 687, §2 (AMD). 1993, c. 410, §U1 (AMD). 1995, c. 386, §3 (AMD). 1995, c. 487, §1 (AMD). 1997, c. 335, §1 (AMD). 1999, c. 333, §§12-17 (AMD). 2001, c. 402, §§4,5 (AMD). 2001, c. 431, §§4,5 (AMD). 2003, c. 622, §1 (AMD). 2005, c. 107, §1 (AMD). 2005, c. 107, §4 (AFF). 2005, c. 452, §A1 (AMD). 2007, c. 114, §1 (AMD). 2007, c. 661, Pt. C, §§2-4 (AMD). 2009, c. 111, §2 (AMD). 2009, c. 270, Pt. D, §§1-4 (AMD). 2009, c. 492, §§1, 2 (AMD). 2009, c. 615, Pt. D,

§§3-5 (AMD). 2009, c. 615, Pt. F, §1 (AMD). RR 2011, c. 2, §10 (AFF). RR 2011, c. 2, §§8, 9 (COR). 2011, c. 653, §§2, 3 (AMD). 2011, c. 653, §33 (AFF). 2011, c. 682, §§14-20 (AMD). 2011, c. 682, §38 (REV).

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Maine Land Use Planning Commission
Guidance Document on Site Law Certification, Land Use Standards

Adopted August 14, 2013

The tables below list the LUPC's land use standards contained in statute and rule and identify which of these standards the LUPC will apply in its certification review of Site Law projects and which standards effectively will be considered by the DEP in its Site Law permit review. Procedures for review of requests for certification are governed by the Commission's Chapter 4, Rules of Practice.

This document is intended solely for guidance to Commission staff and the public when interpreting the statutory criteria for certification of Site Law projects. The document may not be relied upon to create rights, substantive or procedural. The Commission reserves the right to act in accordance with its statute and regulations, including in a manner that may vary from this document. Nothing in this document shall be construed to supersede or replace the statute, rules or Comprehensive Land Use Plan administered by the Commission.

Statutory Criteria for Approval – Also in LUPC rule at section 10.24

Section of Law	LUPC	DEP	Notes
Section A			
Technical and financial capacity		**DEP**	
Solid waste and sewage disposal		**DEP**	
Odor		**DEP**	
Water supply		**DEP**	
Section B			
Traffic and transportation arteries	**LUPC**		
Section C			
No undue adverse effect on existing uses, scenic character, and natural and historic resources		**DEP**	
Section D			
Soil suitability, sewage disposal		**DEP**	
Section E			

18 ELKINS LANE, HARLOW BUILDING
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Conformance with statute, regulations, standards and plans	**LUPC**		This is accomplished through the application of the statute and rules, and using the CLUP to inform that application, as described in the CLUP guidance document.
Section F			
Subdivision approval	**LUPC**	**DEP**	Both agencies have a role – detailed below.
Closing Paragraph			
Public health, safety and general welfare	**LUPC**		This is broad authority for the commission to protect the public, but in the certification context would primarily apply to the adequacy of fire, police and ambulance services. In the case of wind energy development, the DEP would implement the evaluation of fire, police and ambulance service adequacy because of the alignment with environmental concerns about fire protection issues.

LUPC Rules, Chapters 10 and 13 Land Use Standards

Section of Rule	LUPC Standard	DEP has Standard	Notes
10.11 Nonconforming Uses and Structures	**LUPC**		
10.25A – Structures Adjacent to Lakes			
Natural and cultural resource values as specified in the Wildlands Lake Assessment		**DEP**	The natural and cultural resources specified in the Wildlands Lake Assessment also are included in the DEP review criteria.
Water quality		**DEP**	
Traditional uses		**DEP**	This may be addressed within the broader Site Law review criteria of harmonious fit and impacts on existing uses.
Regional diversity		**DEP**	This may be addressed within the broader Site Law review criteria of harmonious fit and impacts on existing uses.
Natural character		**DEP**	
Lake management goals		**DEP**	Lake management goals, which are furthered by the classification system, are reflected in the Chapter 10 provisions specific to each subdistrict that address which uses are allowed, including at what density, around lakes within the various management classes. The LUPC's zoning (*i.e.,* subdistrict designations) also reflect lake management classifications. Through its zoning (including review of rezoning petitions) and application of its subdistrict-specific land use standards the Commission, as part of its important planning role, will promote the management goals of a lake's classification as part of its certification review, but will not separately apply Section 10.25(A)(6), which is tied to the Commission's statutory authority to evaluate whether a proposed development fits harmoniously into the existing natural environment. The DEP, under its similar statutory authority, will evaluate whether a

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Section of Rule	LUPC Standard	DEP has Standard	Notes
			proposed development fits harmoniously into the existing natural environment and will not adversely affect existing uses, scenic character, or other natural resources. The Commission's lake information will be available to the DEP should the DEP find it informative in conducting its review.
Landowner equity	**LUPC**	**DEP**	**LUPC** – limits on density of development. **DEP** – phosphorus.
10.25B Prospectively Zoned Areas			
Dimensional standards	**LUPC**		*See* 10.26.
Vegetative buffering		**DEP**	This is related to visual buffering of development – DEP will apply more general standard.
Building layout	**LUPC**		
10.25C Technical and Financial Capacity		**DEP**	*See* Chapter 4 rulemaking (included as part of January 2013 LUPC agenda materials; available on the LUPC website)
10.25D Vehicular Circulation, Access and Parking (except runoff – 10.25(D)(3)(b))	**LUPC**		10.25(D)(3)(b) will be covered under several sections of DEP's standards.
10.25E Scenic Character, Natural and Historic Features		**DEP**	
10.25F Noise and Lighting			
Noise		**DEP**	
Lighting	**LUPC**		
10.25G Soil Suitability		**DEP**	
10.25H Solid Waste Disposal		**DEP**	
10.25I Subsurface Waste Water Disposal		**DEP**	
10.25J Water Supply		**DEP**	
10.25K Surface Water Quality		**DEP**	
10.25L Phosphorus Control		**DEP**	
10.25M Erosion and Sedimentation Control		**DEP**	
10.25N Groundwater Quality		**DEP**	
10.25O Air Quality		**DEP**	

Section of Rule	LUPC Standard	DEP has Standard	Notes
10.25P Wetland Alterations		**DEP**	
10.25Q Subdivision and Lot Creation			
Counting parcels	**LUPC**	**DEP**	LUPC standards are related to the legal definition of subdivision in the UT; the DEP's standards relate to triggering Site Law. These are different and both are necessary.
Level 2 subdivision (no rezoning)	**LUPC**		
Layout and design	**LUPC**		
Spaghetti lots	**LUPC**		
Subdivision redistricting (open space)	**LUPC**		
Certificates of compliance	**LUPC**		LUPC will issue COCs for only the Commission-related standards. Commission staff will report possible DEP standard problems to DEP.
Filing plats		**DEP**	LUPC will draft form of condition for DEP review, DEP will impose condition.
Recording of large lot land divisions	**LUPC**		
10.25R Cluster Development	**LUPC**		
10.25S Open Space	**LUPC**		
10.25T Activities in Flood Prone Areas	**LUPC**		LUPC will work with DEP early because flood standards also impact issues such as fill and foundations.
10.25 U Affordable Housing	**LUPC**		LUPC, but DEP will make wastewater determination.
10.26A-G Dimensional Requirements	**LUPC**		Consists of lot size, frontage, setbacks, lot coverage, height, exceptions.
10.27A Agricultural Management Activities	**LUPC**	**DEP**	DEP only if in conjunction with a development activity.
10.27B Vegetation Clearing	**LUPC**	**DEP**	DEP will apply clearing standards in NRPA resource areas; LUPC will apply clearing standards in other areas, and the two agencies will coordinate review.
10.27C Mineral Exploration and Extraction	**LUPC**		These activities generally do not trigger Site Law. Metallic mineral mining is excluded from the definition of Mineral Extraction and is handled in chapter 13.
10.27D Roads and Water Crossings		**DEP**	Except that MFS may also regulate in some areas.
10.27E Timber Harvesting	**LUPC**		LUPC, but only in development zones – MFS

Section of Rule	LUPC Standard	DEP has Standard	Notes
			responsible in Management and Protection zones.
10.27F Filling and Grading		**DEP**	These address natural resource impacts and visual impacts – DEP will evaluate these in a site-specific way for Site Law projects.
10.27G Motorized Recreational Gold Prospecting	**LUPC**		
10.27H Driveways Associated with Residential Structures and Uses			
Setbacks, frontage	**LUPC**	**DEP**	**LUPC** For individually permitted residences. **DEP** (for other than individually permitted dwellings – *e.g.,* condo complex).
Roadway entry	**LUPC**	**DEP**	**LUPC** For individually permitted residences. **DEP** (for other than individually permitted dwellings – *e.g.,* condo complex).
Water crossings, wetlands, erosion, fill		**DEP**	
10.27I Pesticide Application	**LUPC**		This is a non-issue because the Commission's only requirement is that the application be in conformance with applicable State and Federal statutes and regulations.
10.27J Signs	**LUPC**		
10.27K Water Impoundments		**DEP**	
10.27L Trailered Ramps, Hand-Carry Launches, and Water-access Ways			
One dock and one access way per subdivision	**LUPC**		
Maintenance		**DEP**	
Dimensional requirements (frontage)	**LUPC**		
Design and construction standards	**LUPC**	**DEP**	LUPC only reviews dimensional requirements e.g., width.
10.27M Service Drops	**LUPC**		This is a non-issue because if the project receives a permit or is exempt from a permit, the service drop is allowed.
10.27N Home Occupations	**LUPC**		Unlikely to be part of a Site Law project.

Section of Rule	LUPC Standard	DEP has Standard	Notes
10.27O Permanent Docking Structures			
Reconstruction – legally existing, size limits, 2 years from damage, relocation to meet setbacks	**LUPC**		
Reconstruction – natural resources, navigation, recreational uses		**DEP**	
Maximum dimensions	**LUPC**		
Construction standards (except limitation on non-water dependent uses)		**DEP**	
Construction standards – only the limitation on non-water dependent uses	**LUPC**		
10.27P Accessory Structures		**DEP**	Site Law permit covers all structures in the development. For individual dwellings in a subdivision, regular LUPC permitting, including 10.27,P would apply.
Chapter 13			Certification standards for Metallic Mineral Mining, which will be regulated under the Metallic Mineral Mining Act, are under development and are not analyzed here.

Maine Natural Areas Program

17 Elkins Lane

State House Station #93

Augusta, Maine 04333

Date: October 29, 2014

To: Ellis Gilliland, Department of Defense, Missile Defense Agency

From: Don Cameron, Ecologist

Re: Rare and exemplary botanical features, Continental United States Interceptor Site (CONUS), Redington, Maine

---

I have searched the Natural Areas Program's Biological and Conservation Data System files for rare or unique botanical features in the vicinity of the proposed site in response to your request received October 23, 2014 for our agency's comments on the project.

According to our current information, there are two rare natural community types that intersect with the periphery of the project area, but are well away from the proposed areas for development. Therefore, there are no specific concerns with the project as currently planned. Note however that this is a large, relatively intact forested area that has received little or no previous survey work, and you may want to have the area surveyed by a qualified botanist.

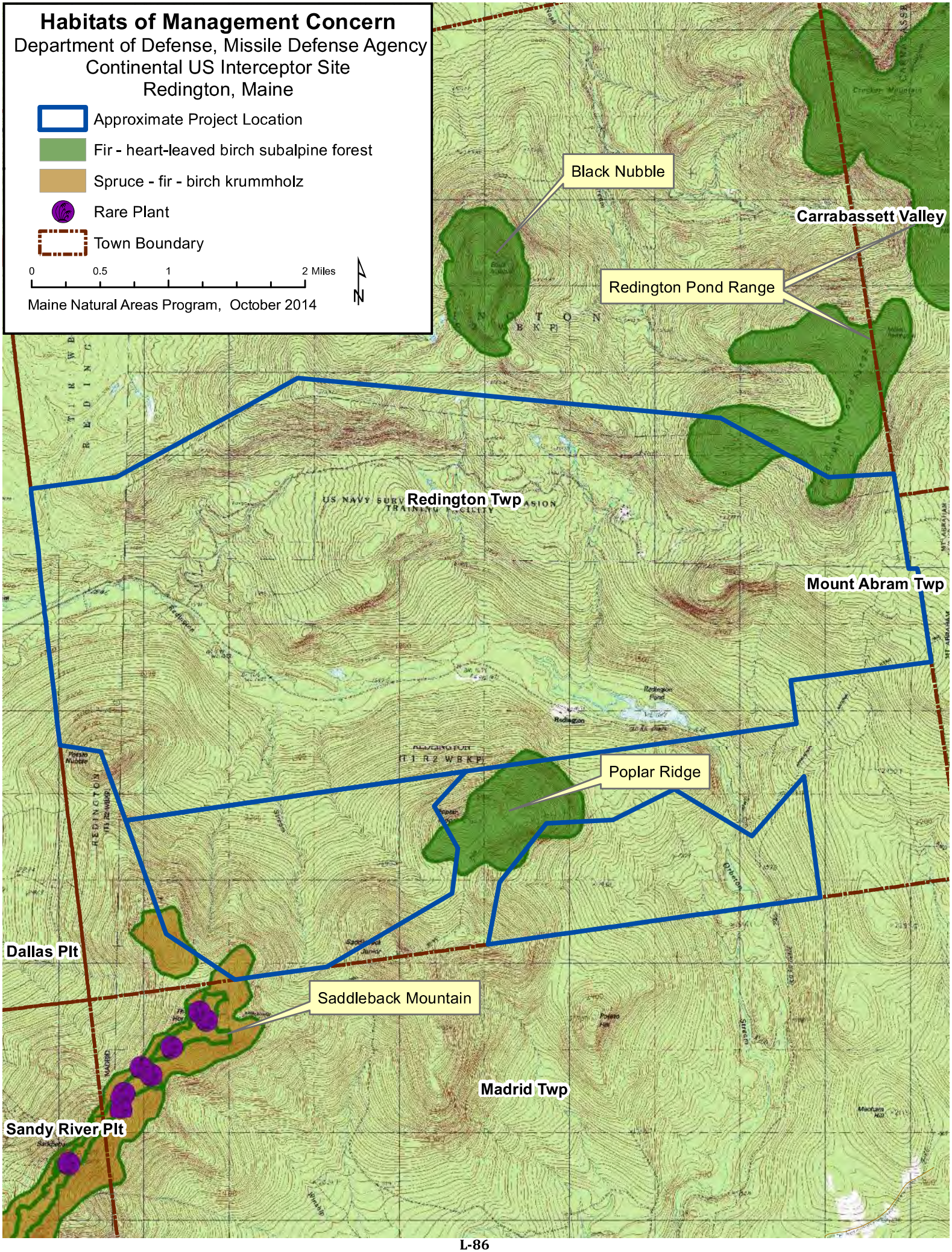
Feature	State Rank	Global Rank	Occurrence Rank	Notes
Fir – heart-leaved birch subalpine forest	S3	GNR	B Good	Poplar Ridge
Fir – heart-leaved birch subalpine forest	S3	GNR	A Excellent	Redington Pond Range
Spruce – fir – birch krummholz	S3	GNR	A Excellent	Saddleback Mountain

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys.

Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We welcome the contribution of any information collected if a site survey is performed.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact our office if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.


Habitats of Management Concern
Department of Defense, Missile Defense Agency
Continental US Interceptor Site
Redington, Maine
Approximate Project Location
Fir - heart-leaved birch subalpine forest
Spruce - fir - birch krummholz
Rare Plant
Town Boundary
0
0.5
1
2 Miles
N
Maine Natural Areas Program, October 2014
Black Nubble
Carrabassett Valley
Redington Pond Range
Redington Twp
Mount Abram Twp
Poplar Ridge
Dallas Plt
Saddleback Mountain
Madrid Twp
Sandy River Plt

Subalpine Fir Forest

State Rank S3

Fir - Heart-leaved Birch Subalpine Forest

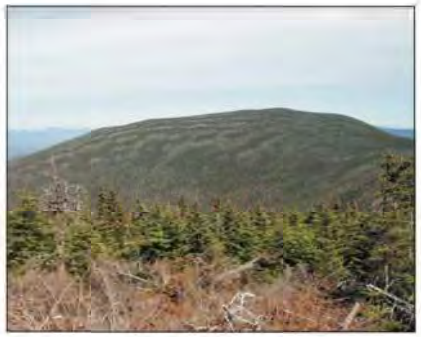
L-87

Community Description

Balsam fir, or mixtures of fir and heart-leaved birch, form a dense canopy of somewhat stunted trees. Patches of heart-leaved birch and mountain ash are common where wind, fire, or landslides have created openings, along with a dense shrub layer of mountain ash, hobblebush, and regenerating fir. Herbs may be sparse, or may form locally dense patches in openings; wood ferns and big-leaved aster in particular tend to be patchy. In some expressions of this type that have developed after fire, the canopy consists almost entirely of paper birch or heart-leaved birch. Fir waves, an unusual landscape pattern of linear bands of fir dieback and regeneration, are another variant of this community.

Soil and Site Characteristics

These forests are commonly found above 2700' on level ridgetops and steep, upper slopes. The mineral soil layer is thin, typically 10-30 cm, and rocky. Natural disturbances such as landslides, wind, fire, and spruce-budworm can exert lasting influences on community dynamics. Recurrent landslides can keep some areas in birch - mountain-ash dominance.



Fir Wave on Crocker Mountain

Diagnostics

Fir or heart-leaved birch (occasionally paper birch) are dominant in a subalpine setting.

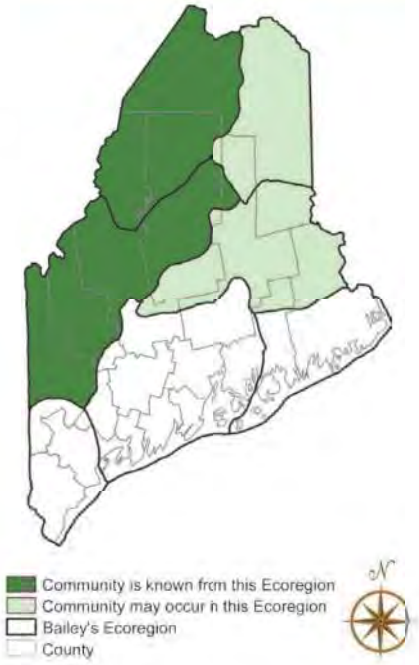
Similar Types

One form of the Maritime Spruce - Fir Forest type is compositionally very similar but occurs at sea level in the extreme environment of the Downeast coast. Decreasing in elevation, this type can grade into Spruce - Fir - Wood-sorrel - Feather-moss Forest or Spruce - Fir - Broom-moss Forest, which are distinguished by their higher proportion of spruce in the canopy and by less stunted trees.

Conservation, Wildlife, and Management Considerations

Although subalpine forests are naturally dynamic as they cycle through periods

Location Map



Subalpine Fir Forest

of weather and insect damage and regeneration, they appear to be relatively stable in overall extent and are extensive on Maine's higher mountains. Many major occurrences are well protected within public lands or private conservation lands. On the few remaining sites on private lands, timber harvesting, recreation, and windpower development could cause lasting impacts. At some sites, past harvesting has resulted in prolific growth of hay-scented and mountain wood fern, inhibiting tree regeneration.

This high-elevation forest community type may be used as nesting habitat by a number of high elevation and/or coniferous forest specialist bird species, such as the spruce grouse, dark-eyed junco, bay-breasted warbler, black-backed woodpecker, white-throated sparrow, and blackpoll warbler. The rare Bicknell's thrush inhabits structurally complex forests above 2500'. The rock vole and long-tailed shrew both inhabit cool moist crevices in rocky habitat at high elevations. Northern bog lemmings may inhabit wet sub-alpine spruce - fir forests in which peat moss is present.

Distribution

Western and central Maine westward (New England - Adirondack Province); likely extends northeasterly to the Gaspé Peninsula.

Landscape Pattern: Large Patch

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Canopy

Balsam fir*
Heart-leaved paper birch
Paper birch*
Red spruce

Sapling/shrub

Balsam fir*
Black spruce*
Heart-leaved paper birch*
Mountain ash*
Wild-raisin

Herb

Balsam fir*
Big-leaved aster*
Bluebead lily
Mountain wood fern*
Northern wood-sorrel
Spinulose wood fern*
Starflower

Bryoid

Common broom-moss
Three-lobed bazzania

Associated Rare Plants

Northern comandra

Examples on Conservation Lands You Can Visit

- Baxter State Park – Piscataquis Co.
- Big Squaw Mountain Public Lands – Piscataquis Co.
- Bigelow Preserve Public Lands – Somerset Co.
- Crocker Mountain, Appalachian Trail – Franklin Co.
- Mahoosuc Mountain, Mahoosuc Public Lands – Oxford Co.
- Sugarloaf Mountain, Appalachian Trail – Franklin Co.

Spruce - Fir Krummholz

State Rank S3

Community Description

Krummholz refers to the zone between treeline and more open alpine vegetation, where tree species are limited by the harsh conditions to a dense shrub growth-form. Black spruce, balsam fir, and heart-leaved paper birch form masses of stunted and wind swept trees 0.5-2 m high. Mountain alder may be locally common, and mountain ash and mountain shadbush are occasional. Total shrub cover is often close to 100%, and these areas may be all but impenetrable. Boreal herbs, such as bluebead lily and Canada mayflower, grow with patches of mosses in small openings among the shrubs, but total herb cover is sparse. Bryoids may be extensive beneath the trees.

Soil and Site Characteristics

This type occupies upper mountain slopes above treeline, typically at elevations of 2700 - 3700'. The cool conditions, lingering snows, and frequent fog and clouds create a fairly moist microclimate, but the sites are very exposed to wind and storms.

Black Spruce Cones

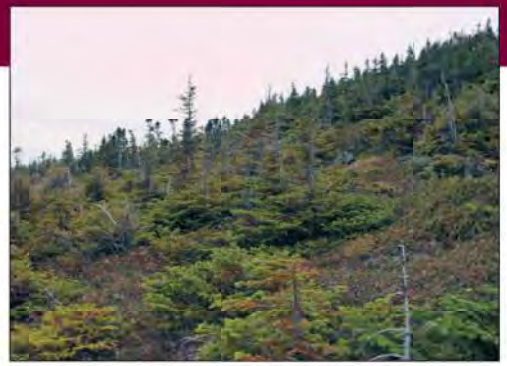
Diagnostics

These are forests of the treeline zone ir which dwarfed and matted trees form a dense shrub layer 0.5-2 m high; usually strongly coniferous.

Similar Types

Rocky Summit Heath can grade into or form a patchwork with this community, but it features lower tree cover (<25%) and more heath shrubs and open spaces. Fir - Heart-leaved Birch Subalpine Forest shares many overstory species and can grade into this community but is distinguished by having more upright trees and a fairly well developed herbaceous layer.

Location Map



Spruce – Fir Krummholz

Conservation, Wildlife, and Management Considerations

Krummholz is extensive on Maine's higher mountains, and most major occurrences are well protected within public lands or private conservation lands. The historic extent has been somewhat reduced by the development of ski areas, and proposals for wind generators could impact other sites. Because traversing this vegetation is so miserable, off-trail impacts from hikers are minimal, in contrast to other alpine/subalpine vegetation types.

This high-elevation dwarfed forest community type provides habitat for Bicknell's thrush, which only inhabits structurally complex forests above 2500'. Coniferous forest specialists like blackpoll warblers and spruce grouse are common associates in this community.

Distribution

Upper-elevation ridges of Maine's western and central mountains (mostly in the New England - Adirondack Province), extending westward and southward along the Appalachians, and likely to the Gaspé Peninsula.

Landscape Pattern: Large Patch

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Sapling/shrub
Balsam fir*
Black spruce*
Heart-leaved paper birch*

Dwarf Shrub
Alpine bilberry*
Labrador tea*

Herb
Black crowberry
Bluebead lily
Bunchberry
Canada mayflower
Creeping snowberry
Mountain cranberry
Stiff clubmoss

Bryoid
Common broom-moss
Fringed Ptilidium liverwort
Red-stemmed moss

Associated Rare Plants

Northern comandra

Associated Rare Animals

Bicknell's thrush

Examples on Conservation Lands You Can Visit

- Baldpate Mountain, Grafton Notch State Park – Oxford Co.
- Bigelow Preserve Public Lands – Somerset Co.
- Goose Eye Mountain, Mahoosuc Public Lands – Oxford Co.
- Mt. Abraham – Franklin Co.
- Mt. Katahdin, Baxter State Park – Piscataquis Co.
- Saddleback Mountain, Appalachian Trail – Franklin Co.

STATE RARITY RANKS

S1 Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
S2 Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
S3 Rare in Maine (20-100 occurrences).
S4 Apparently secure in Maine.
S5 Demonstrably secure in Maine.
SU Under consideration for assigning rarity status; more information needed on threats or distribution.
SNR Not yet ranked.
SNA Rank not applicable.
S#? Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).

Note: **State Rarity Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

GLOBAL RARITY RANKS

G1 Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
G2 Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
G3 Globally rare (20-100 occurrences).
G4 Apparently secure globally.
G5 Demonstrably secure globally.
GNR Not yet ranked.

Note: **Global Ranks** are determined by NatureServe.

STATE LEGAL STATUS

Note: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's **Endangered** and **Threatened** plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

E ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.
T THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

NON-LEGAL STATUS

SC SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
PE Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last known occurrence has been documented.

Visit our website for more information on rare, threatened, and endangered species!
http://www.maine.gov/dacf/mnap

ELEMENT OCCURRENCE RANKS - EO RANKS

Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- **Size**: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- **Condition**: For communities, condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- **Landscape context**: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of **A**, **B**, **C**, or **D**, where **A** indicates an **excellent** example of the community or population and **D** indicates a **poor** example of the community or population. A rank of **E** indicates that the community or population is **extant** but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

Note: **Element Occurrence Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species!
http://www.maine.gov/dacf/mnap

MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

PAUL R. LEPAGE
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

October 28, 2014

Mr. Ellis Gilliland, P.E.
Missile Defense Agency/DPF
Building 5222, Martin Road
Redstone Arsenal, AL 35898

Project: MHPC# 1158-14 - U.S. MDA & U.S. Navy; Continental United States (CONUS) Interceptor Site; SERE East; EIS DOPAA dated September 2014
Town: Redington Township, ME

Dear Mr. Gilliland:

In response to your recent request, I have reviewed the information received October 1 and 24, 2014 to continue consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Regarding archaeological survey, the scope of work for both prehistoric and historic resources is acceptable to our office.

Regarding architectural resources, our October 24 meeting discussed several potential issues including the extent of the project's visibility along the National Register eligible Appalachian Trail (not simply certain prominent viewpoints), the possible transportation route and necessary upgrades for conveying construction materials/equipment, the introduction of lighting and noise in a previously undeveloped heavily forested valley, the potential for cumulative effects, and that the scope of architectural survey and Area of Potential Effects (APE) is still being evaluated and developed by MDA/Navy.

Based on the mapping studies to date, it appears that National Register listed properties have been identified in the SERE East project area. However, National Register listed properties still need to be identified along the chosen transportation route. Furthermore, properties which are potentially eligible for listing in the National Register must also be considered pursuant to Section 106. Architectural survey may be necessary depending on the results of the studies involving light levels, the chosen transportation route, proposed road upgrades etc. Please note that no comprehensive architectural survey has ever been conducted for the Rangeley area.

With regard to the proposed APE, we conclude that until night glow from the facility's lighting can be modeled, the APE cannot be fully determined as the extent and direction of its effect may be different from that of the viewshed analysis. Furthermore, we believe that the APE

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FAX: (207) 287-2335

must be drawn to consider the cumulative effect that large developments, including but not limited to the Saddleback and Sugarloaf ski areas and proposed CONUS facilities, have on the characteristics of the Appalachian Trail that qualify it for listing in the National Register.

Our office would appreciate receiving a copy of all public comments received that mention cultural resources, including but not limited to the Appalachian Trail etc. We would also appreciate receiving copies of all comments submitted by the National Park Service.

Please contact me if we can be of further assistance in this matter.

Sincerely,

Earle G. Shettleworth, Jr.
State Historic Preservation Officer

cc. Kari Moore, Navy
Kerry Vautrot, Navy

MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

PAUL R. LEPAGE
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

August 26, 2014

Martin F. Duke, Director
Facilities, Military Construction, and Environmental Management
Department of Defense
Missile Defense Agency
5700 18th Street
Fort Belvoir, VA 22060-5573

Project: MHPC #1158-14; Environmental Impact Statement, Continental United States Interceptor Site; Center for Security Forces Detachment Kittery Survival, Evasion, Resistance, and Escape Facility (SERE East)
Location: Redington TWP, Maine

Dear Mr. Duke:

I have reviewed the information received August 4, 2014 to initiate consultation on the above referenced Environmental Impact Statement (EIS). We are reviewing this project pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended.

Based on e-mail communications with Ms. Kerry Vautrot, Navy Cultural Resources Manager at the Portsmouth Naval Shipyard, it is our understanding that the proposed EIS will include the following studies as they relate to cultural resources:

- Phase I archaeological survey of the potential areas of construction within the installation and the access road (Redington Road);
- Visual assessment to determine visibility of the proposed areas of construction; and
- Cultural Affiliation Study to identify which tribes, including displaced tribes, which consider the site significant.

In addition to the studies noted above, we recommend that an architectural survey be undertaken and/or existing studies reviewed to determine if there are above ground historic resources in the area of potential effect (APE), and what the impact will be on them.

At the information meeting held in Augusta on May 15, 2014, I asked if the Missile Defense Agency had established the APE for the proposed undertaking, and in particular if that process had taken into consideration the potential impacts on historic properties that could result from infrastructure upgrades necessary to deliver system components to the SERE site. This potential effect continues to be of concern to the Commission and it should be addressed in the EIS.

We look forward to continuing consultation on this undertaking. In the meantime, if you have any questions regarding our comments, please do not hesitate to contact met.

Sincerely,

Kirk F. Mohney

Kirk F. Mohney
Deputy State Historic Preservation Officer

cc: Kerry Vautrot

PHONE: (207) 287-2132

FAX: (207) 287-2335

From: Crosby, Buff L CTR MDA/DPFE <buff.crosby.ctr@mda.mil>
Sent: Monday, September 22, 2014 7:53 AM
To: Claxton, Marshall; McNeil, Laura
Cc: Lemmond, Tina R CTR MDA/DPFE; Venable, Joe, CTR, DPW
Subject: FW: MDA CIS and SERE Comments
Signed By: buff.crosby.ctr@mda.mil

Marshall/Laura,

Please see below. I have asked for a status of the arch workplan.

Thanks
Buff

-----Original Message-----
From: Vautrot, Kerry A CIV NAVFAC MIDLANT, PWD Maine
[mailto:kerry.vautrot@navy.mil]
Sent: Monday, September 22, 2014 6:26 AM
To: Crosby, Buff L CTR MDA/DPFE; Gilliland, Ellis CIV MDA/DPFE
Cc: McGinnis, Benjamin A CIV NAVFAC MIDLANT, EV; Moore, Kari S CIV NAVFAC MIDLANT, PWD Maine
Subject: FW: MDA CIS and SERE Comments

Forwarding my e-mail exchange with the Aroostook Band of Micmacs re: EIS.

I'll continue to send any further communication.

Best,

Kerry

Kerry Vautrot
Cultural Resources Manager
NAVFAC PWD-ME Environmental
207-438-4488 (o)
207-210-4532 (c)
kerry.vautrot@navy.mil

-----Original Message-----
From: Vautrot, Kerry A CIV NAVFAC MIDLANT, PWD Maine
Sent: Monday, September 22, 2014 7:20 AM
To: 'Jennifer Pictou'
Subject: RE: MDA CIS and SERE Comments

Jennifer,

I will pass your request for future involvement on to the MDA team leading the

EIS. We will continue to provide you with materials as they become available and notify you of future meetings.

The next cultural resources-related action will be review of the archaeological work plan. Please let me know if you would be interested in reviewing this document or the subsequent report once produced.

Best,

Kerry

Kerry Vautrot
Cultural Resources Manager
NAVFAC PWD-ME Environmental
207-438-4488 (o)
207-210-4532 (c)
kerry.vautrot@navy.mil

-----Original Message-----
From: Jennifer Pictou [mailto:jpictou@micmac-nsn.gov]
Sent: Friday, September 19, 2014 5:39 PM
To: Vautrot, Kerry A CIV NAVFAC MIDLANT, PWD Maine
Subject: MDA CIS and SERE Comments

Hello Kerry,

I have no comments at this time for the potential CIS and SERE East possible development site but I would definitely like to be part of the conversation as the issue progresses.

Jennifer Pictou
Tribal Historic Preservation Officer
Aroostook Band of Micmacs
7 Northern Road
Presque Isle, ME 04769
jpictou@micmac-nsn.gov
207-404-4113

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